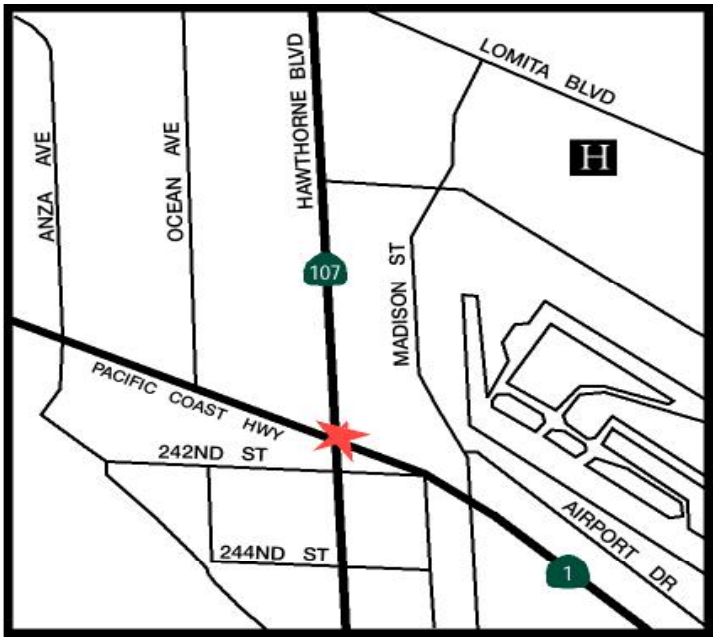
STATE ROUTE-1 (PACIFIC COAST HIGHWAY) at STATE ROUTE-107 (HAWTHORNE BLVD)

INTERSECTION IMPROVEMENT PROJECT



DRAFT
ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (EA/IS) and SECTION 4(f) EVALUATION

On State Route 1 at State Route 107
From 0.1 KM West of Madison Street to 0.04 KM East of Ocean Avenue
07-SR-1 KP 25.7 (PM 16.0)
07-SR-107 KP 0.0 (PM 0.0)
In the City of Torrance, in Los Angeles County
07-217200

OCTOBER 2002

Caltrans

Metric

FHWA

General Information About This Document

What's in this document?

This document is an Environmental Assessment/Initial Study (EA/IS). It examines the potential environmental impacts of alternatives for the proposed project located in the City of Torrance, in Los Angeles County, California. The document describes why the project is being proposed, alternative methods for constructing the project, the existing environment that could be affected by the project, and potential impacts from each of the alternatives.

What should you do?

- Please read this Environmental Assessment/Initial Study (EA/IS)
- We welcome your comments. If you have any concerns regarding the proposed project, please attend the Public Meeting and/or send your written comments to Caltrans by the deadline. Submit your comments via regular mail to Caltrans, Attn.:

  Mr. Ronald J. Kosinski
  Deputy District Director
  Division of Environmental Planning
  California Department of Transportation
  120 South Spring Street, Rm. 1-8A
  Los Angeles, CA 90012

- Please send comments by the deadline: **Wednesday December 5, 2002**
- And/or attend the Public Meeting: **Wednesday, November 20, 2002 from 7pm-9:30pm at South Torrance High School, located at 4801 Pacific Coast Highway, Torrance, CA**

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project. (2) undertake additional environmental studies, or (3) abandon the project. If the project were given environmental approval and funding appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternative formats, please write to Caltrans, Division of Environmental Planning, Attn. Mr. Ronald J. Kosinski (address above).

Voice, or use the California Relay Service TTY number (800) 735-2929

07-LA-1 KP 25.7 (PM 16.0)
07-LA-107 KP 0.0 (PM 0.0)
07-217200

On State Route 1 at State Route 107
From 0.1 KM West of Madison Street to 0.04 KM East of Ocean Avenue
07-SR-1 KP 25.7 (PM 16.0)
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In the City of Torrance, in Los Angeles County
07-217200

ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (EA/IS) and SECTION 4(f) EVALUATION

Submitted Pursuant to: (State) Division 13. Public Resources Code
(Federal) 42 USC 4332(2)(C)

U.S. DEPARTMENT OF TRANSPORTATION
Federal Highway Administration
and
THE STATE OF CALIFORNIA
Department of Transportation

_____
Date of Approval

_____
Ronald J. Kosinski
Deputy District Director
Division of Environmental Planning
California Department of Transportation
District 7 – Los Angeles

_____
Date of Approval

_____
Cesar Perez
Senior Transportation Engineer
Federal Highway Administration

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SCH No.: _____
07-SR-1 KP 25.7 (PM 16.0)
07-SR-107 KP 0.0 (PM 0.0)
07-217200

DRAFT NEGATIVE DECLARATION (CEQA)

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department or "Caltrans") proposes to improve traffic flow and safety at the intersection of State Route-1 (Pacific Coast Highway, PCH) and State Route-107 (Hawthorne Boulevard) through an intersection improvement and reconfiguration project. The proposed project area is located in the City of Torrance, in Los Angeles County. The action is intended to widen and upgrade the intersection via the acquisition of right of way, the construction of dedicated right and left-hand turn pockets, restriping, and resignalization. Utility relocation will be required.

The proposed project is comprised of two build Alternatives that call to improve and reconfigure the intersection as follows:

1) Construct two (2) left turn pockets on both eastbound and westbound PCH
2) Construct one (1) right turn pocket on both eastbound and westbound PCH
3) Construct one (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

When considering the existing configuration, the proposed project will add:

1) One (1) left hand turn pocket on both eastbound and westbound PCH
2) One (1) right turn pocket on both eastbound and westbound PCH
3) One (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

Determination

An Initial Study has been prepared by Caltrans and the Federal Highway Administration (FHWA). On the basis of this study, it is determined that the proposed project will not have a significant effect upon the environment for the following reasons: (1) the proposed project will not significantly affect topography, seismic exposure, floodplains, wetlands, or water quality; (2) the proposed project will not significantly affect natural vegetation, sensitive, endangered, or threatened plant or animal species, or agriculture; (3) the proposed project will not significantly increase amounts solid waste or increase the consumption of energy and natural resources; (4) the proposed project may uncover hazardous waste, but any reuse or disposal of contaminated soil will be in conformance with the California Department of Toxic Substances Control regulations; (5) the proposed project will not significantly affect air quality; (6) the proposed project may affect noise levels, but noise barriers are not practical or desirable since the vast majority of the project segment is currently designated as commercial use or because noise barriers would obstruct existing driveways; (7) the proposed project will not significantly affect land use, public facilities, or other socioeconomic features; (8) the proposed project will not require acquisition of significant amounts of property; (9) the proposed project will not significantly affect aesthetics, parklands, open space, or cultural, paleontological, historic, or scenic resources.

_____ _____

Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning
California Department of Transportation, District 7

Date of Approval

PROJECT SUMMARY

The California Department of Transportation (the Department, or "Caltrans") proposes to improve the intersection of State Route-1 (Pacific Coast Highway, PCH) and State Route-107 (Hawthorne Boulevard) through an intersection improvement project. The Department intends to address the need for improvement of traffic flow and safety at the intersection. The proposed project will accomplish this by enhancing the capacity, level of service, and mobility through the intersection. The proposed project has the support of the City of Torrance.

Three Alternatives are being considered. The two build alternatives require the acquisition of right of way, and the subsequent relocation of some businesses immediately adjacent to the intersection. All partially and fully acquired businesses shall be treated in conformance with the Federal Uniform Relocation Act. The "No Project" Alternative is also being considered.

Small acquisitions of land from Walteria Park (a public park adjacent to the proposed project area) are being considered as well. The parkland proposed for acquisition is located at the northernmost outer edge of the park, where it borders the south side of PCH. The proposed project will not impact any park facilities since the area proposed for acquisition is small, and since it will be limited to the northernmost outer edge of the park. The impact analysis is contained in the attached Section 4(f) document.

Hazardous waste is another concern. A Site Investigation (SI) was conducted to evaluate the potential existence of soil contamination caused by past and present land uses at and adjacent to the intersection. The SI studied the presence and concentration of contaminants at most of the properties proposed for acquisition. Some properties were unable to be investigated fully due to access limitations imposed by certain business owners. Thus these studies will have to be conducted at a later date. The Department is currently in the process of obtaining a court order in order to access parcels and study them. All contaminated soils shall be treated in conformance with the California Department of Toxic Substances Control Regulations.

There will be short-term (temporary) noise, dust, and access problems which will result from construction of the proposed project. Measures to minimize these impacts are discussed in this document. Since these construction-related impacts will not be permanent, they are considered below the level of significance as defined by California Environmental Quality Act.

Because of the findings of this draft Environmental Assessment/Initial Study (EA/IS), this Department anticipates that a Finding of No Significant Impact (FONSI)/Negative Declaration (ND) will be the appropriate Environmental Document in accordance with the National Environment Policy Act (NEPA) and the California Environment Quality Act (CEQA).

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FIGURES

TABLES

ABBREVIATIONS:

AADT – Average Annual Daily Traffic

CEQA- California Environment Quality Act

EA- Environmental Assessment

FONSI- Finding of No Significant Impact

IS- Initial Study

LOS- Level of Service

ND- Negative Declaration

NEPA- National Environment Policy Act

1-PROJECT PURPOSE, NEED, AND JUSTIFICATION

1. PROJECT PURPOSE, NEED, AND JUSTIFICATION

1.1 Introduction

The California Department of Transportation (the Department, or "Caltrans") proposes to improve traffic circulation and safety at the intersection of State Route-1 (Pacific Coast Highway, PCH) and State Route-107 (Hawthorne Boulevard) through an intersection improvement project. The proposed project area is located in the City of Torrance, in Los Angeles County (Figure 1). The action is intended to widen and upgrade the intersection via the acquisition of right of way, the construction of dedicated right and left turn pockets, and restriping, and resignalization. Utility relocation will be required.

Pacific Coast Highway and Hawthorne Boulevard are heavily traveled arterials which traverse highly urbanized areas of the South Bay. State Transportation Improvement Program (STIP) funds are anticipated to fund this project. A total of three (3) project alternatives have been considered, including the "No Build" alternative.

1.2 Project Need and Purpose

The City of Torrance identified the intersection of PCH and Hawthorne Boulevard as in need of improvement. The City submitted the project as a candidate for inclusion into the Governor's Transportation Initiative and it was subsequently accepted. Now through the proposed action, the Department intends to address the need for improvement of safety and traffic flow at and around the intersection. The proposed project will accomplish this by enhancing the capacity, level of service, and mobility through the intersection, and consequently reducing the number of congestion related accidents, and the number of cars avoiding the intersection by cutting through nearby residential streets.

1.3 Project Need: Traffic Conditions, Accident Rates, and Commute Savings

1.3.1 Current and Forecasted Traffic

Traffic conditions, specifically congestion levels and accident rates, were analyzed at the intersection. Congestion levels were analyzed based on a Level of Service (LOS) rating, Annual Average Daily Traffic (AADT) volume, and AM/PM peak traffic period volumes.

Table 1 presents both the 1999 and 2002 AADT and AM/PM peak traffic period volumes for each leg of the intersection. Table 2 presents the various LOS definitions. Table 3 presents in comparative form, the existing capacity, the AM/PM peak traffic period volumes, the volume per capacity (V/C) ratio, and the LOS for the years 1999 and 2002 AM/PM peak traffic periods. Table 4 presents in comparative form, the existing capacity at the intersection, the capacity at the

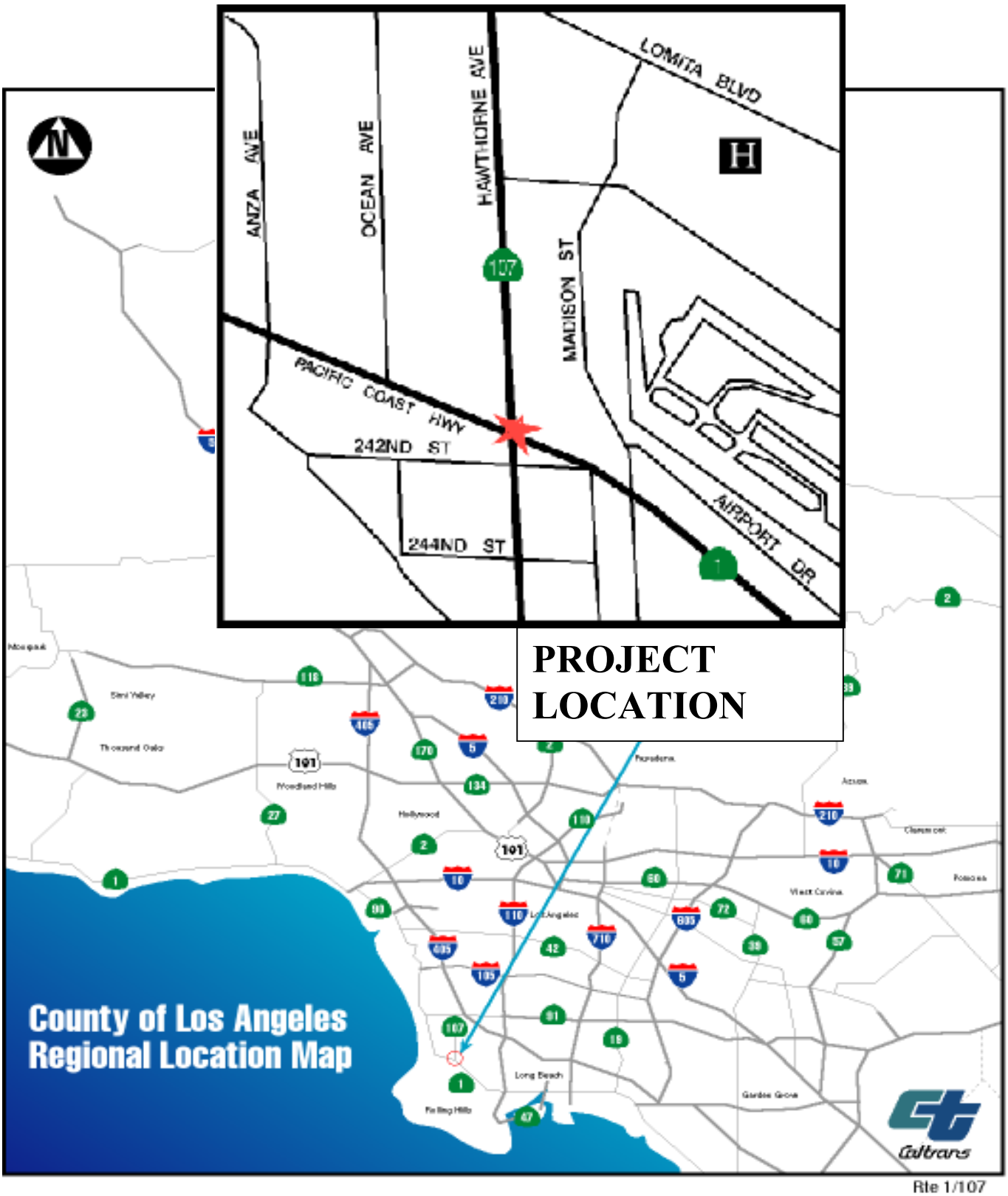

ANZA AVE
OCEAN AVE
HAWTHORNE AVE
LOMITA BLVD
MADISON ST
PACIFIC COAST HWY
242ND ST
244ND ST
AIRPORT DR
H
107
PROJECT LOCATION
County of Los Angeles
Regional Location Map
Caltrans
Rte 1/107

Figure 1

TABLE 1

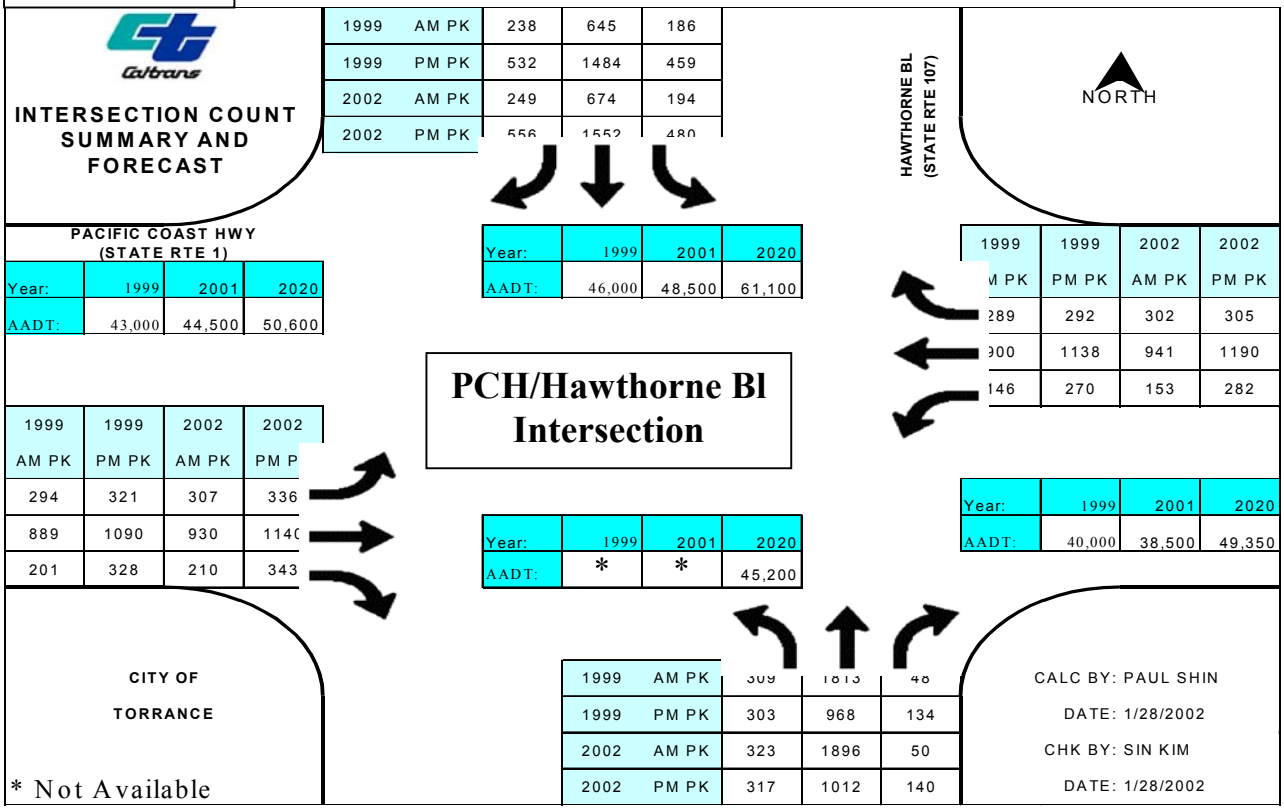


TABLE 2

LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

LOS	V/C	DEFINITION	
A	0.00 - 0.60	EXCELLENT	No vehicle waits longer than one red light and no approach phase is fully used
B	>0.60 - 0.70	VERY GOOD	An occasional approach phase is fully utilized; many drivers begin to feel some what restricted within groups of vehicles.
C	>0.70 - 0.80	GOOD	Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.80 - 0.90	FAIR	Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.90 - 1.00	POOR	Represents the most vehicles intersection approaches can accomondate; may be long lines of waiting vehicles through several signal cycles.
F	>1.00	FAILURE	Backups from nearby locations or on cross-streets may restrict or prevent movement of tremendous delays with continuously increasing queue lengths.

TABLE 3

INTERSECTION CAPACITY UTILIZATION CALCULATION

LOCATION: PACIFIC COAST HWY~RTE 1
HAWTHORNE BL~RTE 107
CALC BY: PAUL SHIN
CHK BY: SIN KIM

CITY OF: TORRANCE
COUNT DATE: FORECAST
CALC. DATE: 1/28/2002

DIRECTION	EXISTING LANES CONFIG	EXISTING CAP	VOLUMES				V/C			
			1999 AM PK	1999 PM PK	2002 AM PK	2002 PM PK	1999 AM PK	1999 PM PK	1999 AM PK	2002 PM PK
NB LEFT	2.00	1920	309	303	323	317	0.16	0.16 *	0.17	0.17 *
NB THRU	2.50	4000	1813	968	1896	1012	0.45 *	0.24	0.47 *	0.25
NB RIGHT	0.50	670	48	134	50	140	0.07	0.20	0.07	0.21
SB LEFT	2.00	1920	186	459	194	480	0.10 *	0.24	0.10 *	0.25
SB THRU	3.00	4800	645	1484	674	1552	0.13	0.31	0.14	0.32
SB RIGHT	1.00	1340	238	532	249	556	0.18	0.40 *	0.19	0.42 *
EB LEFT	1.00	960	294	321	307	336	0.31 *	0.33	0.32 *	0.35
EB THRU	2.50	4000	889	1090	930	1140	0.22	0.27	0.23	0.28
EB RIGHT	0.50	670	201	328	210	343	0.30	0.49 *	0.31	0.51 *
WB LEFT	1.00	960	146	270	153	282	0.15	0.28 *	0.16	0.29 *
WB THRU	2.50	4000	900	1138	941	1190	0.23	0.28	0.24	0.30
WB RIGHT	0.50	670	289	292	302	305	0.43 *	0.44	0.45 *	0.46
CLEARANCE							0.10 *	0.10 *	0.10 *	0.10 *
ICU VALUE							**1.39**	**1.43**	**1.45**	**1.49**
LEVEL OF SERVICE							**F**	**F**	**F**	**F**

NOTES:
1999 VOLUMES WERE PROJECTED TO 2002 UTILIZING AN AMBIENT GROWTH FACTOR OF 1.5% PER YEAR.
RIGHT TURN CAPACITY = 1340 VPH
LEFT TURN CAPACITY = 960 VPH
THROUGH CAPACITY = 1600 VPH

TABLE 4

INTERSECTION CAPACITY UTILIZATION CALCULATION

LOCATION: PACIFIC COAST HWY~RTE 1
HAWTHORNE BL~RTE 107
CALC. BY: PAUL SHIN
CHK BY: SIN KIM

CITY OF: TORRANCE
COUNT DATE: FORECAST
CALC. DATE: 1/28/2002

DIRECTION	LANES		CAPACITY		VOLUMES		V/C			
	EXISTING CONFIG	WITH PROJ	EXISTING CONFIG	WITH PROJ	2002 AM PK	2002 PM PK	2002 EXISTING CONFIG AM PK	2002 EXISTING CONFIG PM PK	2002 WITH PROJ AM PK	2002 WITH PROJ PM PK
NB LEFT	2.00	2.00	1920	1920	323	317	0.17	0.17 *	0.17	0.17 *
NB THRU	2.50	3.00	4000	4800	1896	1012	0.47 *	0.25	0.39 *	0.21
NB RIGHT	0.50	1.00	670	1340	50	140	0.07	0.21	0.04	0.10
SB LEFT	2.00	2.00	1920	1920	194	480	0.10 *	0.25	0.10 *	0.25
SB THRU	3.00	3.00	4800	4800	674	1552	0.14	0.32	0.14	0.32
SB RIGHT	1.00	1.00	1340	1340	249	556	0.19	0.42 *	0.19	0.42 *
EB LEFT	1.00	2.00	960	1920	307	336	0.32 *	0.35	0.16 *	0.17 *
EB THRU	2.50	3.00	4000	4800	930	1140	0.23	0.28	0.19	0.24
EB RIGHT	0.50	1.00	670	1340	210	343	0.31	0.51 *	0.16	0.26
WB LEFT	1.00	2.00	960	1920	153	282	0.16	0.29 *	0.08	0.15
WB THRU	2.50	3.00	4000	4800	941	1190	0.24	0.30	0.20	0.25 *
WB RIGHT	0.50	1.00	670	1340	302	305	0.45 *	0.46	0.23 *	0.23
CLEARANCE							0.10 *	0.10 *	0.10 *	0.10 *
ICU VALUE							**1.45**	**1.49**	**0.98**	**1.10**
LEVEL OF SERVICE							**F**	**F**	**E**	**F**

NOTES:
1999 VOLUMES WERE PROJECTED TO 2002 UTILIZING AN AMBIENT GROWTH FACTOR OF 1.5% PER YEAR.
RIGHT TURN CAPACITY = 1340 VPH
LEFT TURN CAPACITY = 960 VPH
THROUGH CAPACITY = 1600 VPH

intersection after project completion, the 2002 AM/PM peak traffic periods V/C ratio and LOS for both the existing intersection configuration and the intersection configuration after project completion. Table 5 does the same as Table 4, except the year 2020 forecasted AM/PM peak traffic period volumes are used. Tables 6 and 7 present intersection traffic accident data from the Traffic Accident Surveillance and Analysis System (TASAS).

Using an ambient growth factor of 1.5% per year, 1999 traffic volumes were projected to 2002 and 2020 in Tables 1-5 at the time of the traffic studies. Ambient growth represents normal increases in through traffic from non-development sources, such as traffic which has both origin and destination outside the study area, but nonetheless, adding to traffic congestion. Ambient growth also includes newly licensed drivers in existing households within in the study area.

As can be seen from Table 1, the AADT volume at the North, East, and West legs of the intersection in 1999 was 46,000, 43,000, and 40,000 respectively. The AADT in 2001 was 48,500, 44,500, and 38,500 respectively. By the year 2020, the AADT volume is forecasted to be 61,100, 50,600, and 49,350 respectively. This is an increase of 32.8%, 17.7%, and 23.4% from the 1999 condition respectively, and an increase of 26.0%, 13.7%, and 28.2% from the 2001 condition, respectively. AADT volumes for the South leg of the intersection were not available since south of PCH, Hawthorne Boulevard is a City street, not a State Highway. The Department will consult with the City of Torrance regarding the availability of the data.

As presented in Tables 3, 4 and 5, the LOS conditions in 1999 and 2002 (past and existing conditions) were classified as F. As defined by Table 2, a LOS F condition is defined as a V/C > 1.00, or as “Failure”. As seen in Table 1, and Tables 3-5, AADT volumes and AM/PM peak traffic period volumes are forecasted to increase. Thus the current failing LOS condition will only deteriorate further, and at a faster rate, resulting in increased and more severe traffic congestion if improvements are not made to the intersection.

For online California traffic data for Interstates and State Highways, please log on to:
http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/index.htm

1.3.2 Accident Rates

In terms of safety considerations, Tables 6 and 7 present intersection traffic accident data from the Traffic Accident Surveillance and Analysis System (TASAS). The accident data, which is expressed in accidents per vehicle-mile, indicates that accident rates at the intersection were higher than Statewide average for similar intersections. The actual accident rates of both north and southbound PCH at the intersection, were 2.25 and 3.46 respectively. The Statewide actual accident rate for similar intersections was 2.10, meaning that the accident rates at the intersection were above the norm, with the southbound PCH accident rates being over 66% higher than the statewide average for similar intersections.

Analysis of collision diagrams and congestion related accidents indicate that sideswipe and rear-end collisions are the types of accidents that can be expected to increase as congestion levels increase. Thus, the congestion relief obtained through the proposed project improvements would aid in the reduction of congestion-related accidents.

TABLE 5

INTERSECTION CAPACITY UTILIZATION CALCULATION

LOCATION: PACIFIC COAST HWY~RTE 1
HAWTHORNE BL~RTE 107
CALC. BY: PAUL SHIN
CHK BY: SIN KIM

CITY OF: TORRANCE
COUNT DATE: FORECAST
CALC. DATE: 1/28/02

DIRECTION	LANES		CAPACITY		VOLUMES		V/C			
	EXISTING CONFIG	WITH PROJ	EXISTING CONFIG	WITH PROJ	2020		2020 EXISTING CONFIG		2020 WITH PROJ	
					AM PK	PM PK	AM PK	PM PK	AM PK	PM PK
NB LEFT	2.00	2.00	1920	1920	422	414	0.22	0.22 *	0.22	0.22 *
NB THRU	2.50	3.00	4000	4800	2478	1323	0.62 *	0.33	0.52 *	0.28
NB RIGHT	0.50	1.00	670	1340	66	183	0.10	0.27	0.05	0.14
SB LEFT	2.00	2.00	1920	1920	254	627	0.13 *	0.33	0.13 *	0.33
SB THRU	3.00	3.00	4800	4800	882	2029	0.18	0.42	0.18	0.42
SB RIGHT	1.00	1.00	1340	1340	325	727	0.24	0.54 *	0.24	0.54 *
EB LEFT	1.00	2.00	960	1920	402	439	0.42 *	0.46	0.21 *	0.23 *
EB THRU	2.50	3.00	4000	4800	1215	1490	0.30	0.37	0.25	0.31
EB RIGHT	0.50	1.00	670	1340	275	448	0.41	0.67 *	0.21	0.33
WB LEFT	1.00	2.00	960	1920	200	369	0.21	0.38 *	0.10	0.19
WB THRU	2.50	3.00	4000	4800	1230	1556	0.31	0.39	0.26	0.32 *
WB RIGHT	0.50	1.00	670	1340	395	399	0.59 *	0.60	0.29 *	0.30
CLEARANCE							0.10 *	0.10 *	0.10 *	0.10 *
ICU VALUE							**1.86**	**1.91**	**1.25**	**1.41**
LEVEL OF SERVICE							**F**	**F**	**F**	**F**

NOTES:
1999 VOLUMES WERE PROJECTED TO 2020 UTILIZING AN AMBIENT GROWTH FACTOR OF 1.5% PER YEAR.
RIGHT TURN CAPACITY = 1340 VPH
LEFT TURN CAPACITY = 960 VPH
THROUGH CAPACITY = 1600 VPH

TABLE 6

TRAFFIC ACCIDENT SURVEILLANCE AND ANALYSIS SYSTEM (TASAS)
APRIL 01, 1998 - MARCH 31, 2001
PCH/Hawthorne Bl Intersection (Northwestbound PCH)

Number of Accidents			Actual Accident Rate [1]			Statewide Average Accident Rate [1]		
Fatality*	Injury*	Total*	Fatality	Injury	Total	Fatality	Injury	Total
0	**3**	**13**	**0**	**0.52**	**2.25**	**0.15**	**0.93**	**2.10**

Note: [1] Accident rates expressed in accidents per million vehicle mile
* Only state related accidents (reported)

TABLE 7

TRAFFIC ACCIDENT SURVEILLANCE AND ANALYSIS SYSTEM (TASAS)
APRIL 01, 1998 - MARCH 31, 2001
PCH/Hawthorne Bl Intersection (Southeastbound PCH)

Number of Accidents			Actual Accident Rate [1]			Statewide Average Accident Rate [1]		
Fatality*	Injury*	Total*	Fatality	Injury	Total	Fatality	Injury	Total
0	**7**	**20**	**0**	**1.21**	**3.46**	**0.15**	**0.93**	**2.10**

Note: [1] Accident rates expressed in accidents per million vehicle mile
* Only state related accidents (reported)

1.3.3 Commute Savings

In terms of time saved while driving through the intersection, Table 8 presents the Commute Delay Savings in seconds for the existing AM/PM peak traffic period volumes, as well as for the year 2020 projected AM/PM peak traffic period volumes. As can be seen from the table, the current delay time at the intersection for the current AM/PM peak traffic periods, as well as the forecasted delay time for the year 2020 AM/PM peak traffic periods, is 54, 58, 90, and 102 seconds, respectively. After completion of the proposed project (implementation of the new intersection configuration), the new delay time at the intersection for the AM/PM peak traffic periods, as well as the forecasted delay time for the year 2020 AM/PM peak traffic periods will be 29, 32, 36, and 44 seconds, respectively. That is a commute savings of 25, 26, 54, and 58 seconds, respectively.

TABLE 8

INTERSECTION DELAYS AT THE PCH/HAWTHORNE BI INTERSECTION				
Existing Intersection	**Delay Time (seconds)**	**New Intersection**	**Delay Time (seconds)**	**Commute Savings (seconds)**
AM Peak	54	**AM Peak**	29	25
PM Peak	58	**PM Peak**	32	26
Year 2020 AM Peak	90	**Year 2020 AM Peak**	36	54
Year 2020 PM Peak	102	**Year 2020 PM Peak**	44	58

2-DESCRIPTION OF PROPOSED PROJECT

2. DESCRIPTION OF PROPOSED PROJECT AND ALTERNATIVES

2.1 Introduction

This section describes the Alternatives that comprise the proposed project: The No-Build (Alternative 1), the Non-standard Build Alternative (Alternative 2), and the Full Standard Build Alternative (Alternative 3). Both build Alternatives call to improve and reconfigure the intersection by widening and upgrading via the acquisition of right of way, the construction of dedicated right and left-hand turn pockets, restriping, resignalization and utility relocation.

The existing intersection configuration is as follows:

- Two (2) left hand turn pockets on both eastbound and westbound PCH
- Zero (0) right hand turn pockets on both eastbound and westbound PCH
- Zero (0) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH
- One (1) exclusive right turn lane on southbound Hawthorne Boulevard to westbound PCH
- Three (3) through lanes on both eastbound and westbound PCH
- Three (3) through lanes on both northbound and southbound Hawthorne Boulevard

The proposed new intersection configurations are discussed in Section 2.2.

2.2 Scheduling

The proposed project will be submitted to the Metropolitan Transportation Authority (MTA) year 2003 call for projects. If the project is approved and fully funded, it is anticipated to begin construction in Fall of 2004 and completed in Fall of 2005. If the proposed project is not fully funded, it may have to be constructed in "phases" or "pieces", as funding becomes available to construct each phase. If this should be the case, two phases are proposed. Phase 1 consists of improving the eastside of the intersection only, while Phase 2 includes improving the westside of the intersection. Together, the two phases would constitute the entire proposed project.

Should phasing of the proposed project be required due to lack of full funding, it is anticipated that Phase 1 would be constructed in the year 2005, and Phase 2 would be constructed in the years to follow. The Department is currently conducting traffic studies to evaluate the level of improvement Phase 1 alone would bring to existing and future traffic conditions at the intersection.

As mandated by the California Environmental Quality Act (CEQA), and the National Environmental Policy Act (NEPA), the proposed project was studied in this EA/IS as a whole, and not as "phases" or "pieces". The entire project footprint and potential environmental, community, and socio-economic impacts were evaluated cumulatively.

2.3 Alternatives Considered

2.3.1 Alternative 1 - The "No Build" Alternative

The "No Build" or "Do Nothing" alternative would result in the cross-section of all four (4) legs of the PCH/Hawthorne Boulevard intersection remaining as is. The No-Build alternative would do nothing to improve the present day, or projected congestion and congestion related problems, thereby leading to a progressive deterioration in the Level of Service (LOS) provided. The purpose and need of the project would remain unaddressed, and thus the objectives of the proposed project unrealized (i.e. congestion relief, safety and travel time improvement). This approach is inconsistent with the Department's goal of minimizing congestion and maintaining an efficient and effective interregional mobility system. Caltrans's mission is to "Improve Mobility Across California".

2.3.2 Alternative 2 – Non-standard Build Alternative

Alternative 2 calls to improve and reconfigure the intersection as follows:

- Construct two (2) left turn pockets on both eastbound and westbound PCH
- Construct one (1) right turn pocket on both eastbound and westbound PCH
- Construct one (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH
- The number of through lanes on both PCH and Hawthorne Boulevard will remain unchanged

When considering the existing configuration, this alternative will add:

- One (1) left hand turn pocket on both eastbound and westbound PCH
- One (1) right turn pocket on both eastbound and westbound PCH
- One (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

This Alternative calls for the utilization of non-standard lane widths and full standard turn pocket widths. This means that all through lane widths will be 3.0m (10ft), instead of 3.6m (12ft), while both the left and right turn pockets will be 3.6m (12ft) in width. The purpose of the non-standard lane widths is to ensure consistency between the existing through lanes leading into and out of the project limits. The non-standard land widths also minimize the right of way acquisition needs of the proposed project, thereby minimizing the impacts to local businesses. Please see the Appendices section of this document for layout and cross section drawings of this Alternative. Please see Table 13 for the list of right of way acquisition needs of this Alternative.

High Occupancy Vehicle (HOV) lanes, Park and Ride facilities, bike lanes, railroad involvement, navigable waterway involvement, and standard highway planting of trees and irrigation are not included as part of this project.

2.3.3 Alternative 3 – Full Standard Build Alternative

Like Alternative 2, this Alternative also calls to:

- Construct two (2) left turn pockets on both eastbound and westbound PCH
- Construct one (1) right turn pocket on both eastbound and westbound PCH

- Construct one (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH
- The number of through lanes on both PCH and Hawthorne Boulevard will remain unchanged

When considering the existing configuration, like Alternative 2, this alternative will add:
- One (1) left hand turn pocket on both eastbound and westbound PCH
- One (1) right turn pocket on both eastbound and westbound PCH
- One (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

However, unlike Alternative 2, this Alternative involves the construction of all full standard lanes and turn pockets. This means that all through lanes, and left and right turn pockets, will be the full standard width of 3.6m (12ft), and thus safer. The traffic capacity of Alternative 2 and Alternative 3 will be the same however.

Alternative 3 will require greater right of way acquisition than Alternative 2, and thus will come at a greater economic cost and greater impact to the project area. Alternative 3 will also result in greater impacts to local businesses, and potentially to the local economy due to the higher number of impacted businesses. Please see the Appendices section of this document for layout and cross section drawings of this Alternative. Also, please see Table 13 for the list of right of way acquisition requirements of this Alternative.

High Occupancy Vehicle (HOV) lanes, Park and Ride facilities, bike lanes, railroad involvement, navigable waterway involvement, and standard highway planting of trees and irrigation are not included as part of this project.

2.4 Other Projects

2.4.1 Caltrans Projects

In addition to the proposed project, there are two other projects planned in the general vicinity of the proposed project area. The first is a Caltrans safety improvement project at the following locations in the City of Torrance:

- PCH at Calle Mayor (KP 27.69)
- Hawthorne Boulevard at 230th St (KP 1.48)
- Torrance Boulevard at 190th St (KP 5.91)
- Sepulveda Boulevard (2.27)

The project will remove signposts from median islands to improve safety and minimize maintenance costs. Additionally, traffic signal hardware will be upgraded to improve visibility of the traffic signal indications and to conform to current design standards. The vehicle detection hardware will also be upgraded to improve signal operation. This project is anticipated to begin construction in Fall 2002 and is anticipated to be completed by Summer 2003.

The second project is a City of Torrance proposed Gap Closure project on Del Amo Boulevard. The roadway extension site is located between the intersections of Del Amo Boulevard at

Madrona/Prairie Avenue to the west, and Del Amo Boulevard at Crenshaw Boulevard to the east. This project is comprised of several alternatives all of which include:

- construction of a new four-lane roadway
- construction of a new bridge over the Burlington Northern Santa Fe (BNSF) railroad tracks
- realignment of a portion of a railroad spur along the sourthern boundary of the Exxon-Mobil property
- construction of retaining walls
- drainage improvements
- relocation of affected utilities
- relocation/reconstruction of affected off-site facilities
- modification and installation of traffic signals

This project is anticipated to begin construction in Fall 2004, and is anticipated to be completed by Fall 2006.

2.4.2 Developments in the Area

It was determined through scoping, in addition to coordination with the City of Torrance as well as the review of the City's General and Community Plans, that there are no new developments planned in or near the vicinity of the proposed project. For information on what scoping is, and why and how it is conducted, please see Section 5 – Consultation and Coordination.

3-AFFECTED (EXISTING) ENVIRONMENT

3. AFFECTED (EXISTING) ENVIRONMENT

3.1 Introduction

The proposed project area is located at the intersection of PCH and Hawthorne Boulevard, in a highly urbanized area of the City of Torrance, in Los Angeles County. PCH is the main transportation corridor of the southernmost portion of the South Bay. Paralleling the coast, PCH connects the South Bay Cities of Lomita, Torrance, Redondo Beach, Hermosa Beach, and Manhattan Beach.

This section will discuss the existing environment of the proposed project area. Section 4-Environmental Evaluation and Discussion, will analyze and discuss the impacts of the proposed action to the area and surrounding communities.

3.2 Topography

The topography of the proposed project area is generally flat and does not contain any unique geologic features.

3.2.1 Geology and Soil

Regionally, the project site is located within the Los Angeles Basin within the Peninsular Ranges, California Geomorphic Province. Locally, the PCH/Hawthorne Boulevard intersection is situated entirely over Quaternary alluvial sendiments consisting of soft plastic clay to stiff silty clay, loose to slighly compact silt, and silty fine sand with sparse lenses of gravel. Structurally this portion of the Basin is characterized by northwest trending hills of the Palos Verdes Peninsula.

3.2.2 Seismicity

The project is located in a seismically active area. The geologic processes that have caused earthquakes in the past can be expected to continue. Seismic events, which are likely to produce the greatest bedrock accelerations, could be a moderate event on the non-zoned Palos Verdes fault and/or a large event on a distant active fault such as the Newport-Inglewood system.

A fault is considered by the State of California to be active if geologic evidence indicated that movement on the fault has occurred in the last 11,000 years, and potentially active if movement is demonstrated to have occurred in the last 2 million years.

There is no geological information that indicates an active fault passing through the project area. The nearest knows active fault (under the Alquist-Priolo Earthquake Fault Zoning Act) is the Newport-Inglewood Earthquake Fault Zone. It is located 11.5km (7.1 miles) to the northeast of the project.

Inferred traces of the Palos Verdes fault have been mapped approximately 1.0km south of the

project. Recent geological, geophysical and seismological studies along the Palos Verdes fault suggest that this fault is active. The Palos Verdes fault is a right lateral strike slip fault and at least two or more magnitude 2+ earthquakes have been recorded every year since 1980 within 5km (3 miles) of the fault trace. Caltech/USGS catalog data suggest that most of the seismicity on the fault appears to be generated at a depth of roughly 8 km (5 miles). However, this fault has not been zoned under the auspices of the Alquist-Priolo Earthquake Fault Zoning Act.

3.2.3 Seismic Phenomenon

Ground shaking is the primary cause of structural damage during an earthquake; it is to be considered the most likely damage-producing earthquake phenomena in the area. The magnitude, duration and vibration frequency characteristics will vary greatly, depending upon the particular causative fault and its distance from the project area

An analysis of fault rupture hazard for a particular fault requires that the fault be located exactly, and it's potential for rupture to be known if only approximately. The PCH/Hawthorne Boulevard intersection is not located within the confines of the Alquist-Priolo Earthquake Fault Zoning Act or a previously well-defined fault trace of the Palos Verdes fault system. Thus based on the review of several geological/seismologic reports, ground rupture hazards are not considered to be a hazard for this project.

The potential for liquefaction could exist when fine salts and sands are located below the water table. The water can also be perched ground water. Liquefaction has been document to affect soils to +/- 15m (50 feet) deep, during prolonged periods of ground shaking. According to the 1999 Seismic Hazard Zones Map – Torrance Quadrangle, the proposed project area is not situated within an area with potential for liquefaction.

3.3 Hydrology

3.3.1 Surface Water

The proposed project area lies within the Los Angeles River Basin of the State Water Resources Control Board. Specifically, the project is located within the Dominguez Watershed. Today, the Dominguez Watershed is comprised of approximately 110 square miles of land in the southern portion of Los Angeles County. Ninety-six percent (96%) of its total area is developed and the overall watershed land use is predominantly transportation. Rather than being defined by the natural topography of its drainage area, the Dominguez watershed boundary is defined by a complex network of storm drains and smaller flood control channels. The Dominguez Channel extends from the Los Angeles International Airport to the Los Angeles Harbor and drains large if not all portions of the cities of Inglewood, Hawthorne, El Segundo, Gardena, Lawndale, Redondo Beach, Torrance, Carson and Los Angeles. The remaining land areas within the watershed drain to several debris basins and lakes or directly to the Los Angeles and Long Beach Harbors.

3.3.2 Floodplain

Flood plain boundaries have been delineated on the Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Agency (FEMA). The project area was shown on the FIRM to lie within Zone C, an area of minimal flooding. The three flood zones are defined as follows:

Zone A- Contained in channel
Zone B- Areas between limits of the 100-year flood and the 500-year flood
Zone C- Areas of minimal flooding

3.3.3 Groundwater

The project site lies within the Coastal Plain of Los Angeles. Regional ground water levels are at or near sea level. The three aquifer systems beneath the project site and surrounding vicinity are the Silverado Aquifer, the Lynwood Aquifer, and the Gardena Aquifer. They are approximately 400ft, 300ft, and 150ft in depth, respectively. There is no known extraction of ground water for beneficial uses from any of the three aquifer systems underlying the project area.

3.4 Air Quality Settings

3.4.1 Regional Air Quality

The project site is located in Los Angeles County, an area within the South Coast Air Basin (Basin) that includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Air quality conditions in the Basin are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), a regional agency that regulates stationary sources of pollution throughout the Basin.

The Basin climate is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border. High mountains surround the rest of the Basin.

The region lies in the semi-permanent, high-pressure zone of the eastern Pacific. The resulting climate is mild, and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, or Santa Ana wind conditions do exist.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid-afternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by mid-morning.

Winds in the vicinity of the project area blow predominantly from the west-southwesterly direction, with relatively low velocities. Wind speeds in the project area average about 8 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion, limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problems are carbon monoxide (CO) and oxides of nitrogen (NO_x) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_x to form photochemical smog.

3.4.2 Local Air Quality

The proposed project site is located within SCAQMD jurisdiction. The SCAQMD maintains ambient air quality monitoring stations throughout the Basin. The air quality monitoring station closest to the project site is located in the City of Hawthorne. The Hawthorne air monitoring station monitors all the criteria pollutants.

Table 9 presents the criteria pollutants monitored at the Hawthorne station, which include CO, ozone (O_3), nitrogen dioxide (NO_2), and fine suspended particulate matter less than 10 microns in diameter (PM_{10}). Sulfur dioxide (SO_2) is not listed because there has been no exceedance of the federal or state standards in the past 10 years. The monitored SO_2 level has been much lower than the standards.

The ambient air quality data in Table 9 shows that NO_2 level is below the relevant state and federal standards in the project area over the last five (5) years. The PM_{10} level at the Hawthorne station exceeded the state standard every year, but not the federal standard. The O_3 level at the Hawthorne station exceeded the state standard for four of the last five years, ranging from one to six days a year, but only exceeded the federal standard once in the last five years. The CO level at the Hawthorne station did not exceed the state or the federal one-hour standard for the last five years. However, the CO level exceeded the state and federal eight-hour standard once for two of the past five years at the Hawthorne station. Please see Appendix 1 for Federal and State Air Quality Regulations, Regional Air Quality Planning Framework, and Study Methodology.

TABLE 9

	CARBON MONOXIDE (CO)				OZONE (O_3)		FINE SUSPENDED PARTICULATE (PM_{10})		NITROGEN DIOXIDE (NO_2)	
	Max 1-hour Conc. (ppm)	Number of Days Exceeded	Max 8-hour Conc (ppm)	Number of Days Exceeded	Max 1-hour Conc. (ppm)	Number of Days Exceeded	Max 24-hour Conc. ($\mu g/m^3$)	Number of Days Exceeded	Max 1-hour Conc. (ppm)	Number of Days Exceeded
State Standards	>20 ppm/1 hour		>= 9 ppm/8 hour		>0.09 ppm/1 hour		>50 $\mu g/m^3$/24 hour		>0.25ppm/1 hour	
2001	7.3	0	5.1	0	0.098	1	75	6	0.11	0
2000	8.7	0	7.1	0	0.095	1	74	9	0.128	0
1999	10.2	0	8.4	0	0.154	1	69	6	0.134	0
1998	11.4	0	9.5	1	0.089	0	66	7	0.15	0
1997	12.4	0	10.3	1	0.113	6	79	4	0.164	0
Maximum	12.4		10.3		0.154		79		0.164	0
Federal Standards	>35 ppm/1 hour		>= 9 ppm/8 hour		>0.12 ppm/1 hour		>150 $\mu g/m^3$/24 hour		>0.053 ppm/ annual avg.	
2001	7.3	0	5.1	0	0.098	0	75	0	ND[2]	0
2000	8.7	0	7.1	0	0.118	0	74	0	0.027	0
1999	10.2	0	8.4	0	0.154	1	69	0	0.029	0
1998	11.4	0	9.5	1	0.089	0	66	0	0.029	0
1997	12.4	0	10.3	1	0.113	0	79	0	0.028	0
Maximum	12.4		10.3		0.154		79		0.029	0

3.5 Hazardous Waste

A Site Investigation (SI) was conducted to evaluate the potential existence of soil contamination caused by past and present land uses. An Initial Site Assessment (ISA) concluded that hazardous waste contamination within the proposed project area was a possibility. The SI studied the presence and concentration of contaminants for which there are established regulatory limits. This would allow the Department to estimate the volume of soil impacted, as well as the cost for remedial activities.

The Department contracted Ninyo and Moore Consultant Inc. to conduct the subsurface investigation. The subsurface sampling included advancing fifty-three (53) soil boreholes distributed among fifteen (15) parcels located immediately adjacent to the intersection, which are proposed sources of right of way acquisition. Four (4) other parcels, also proposed for right of way acquisition, were unable to be accessed for inclusion in this study. Please see Section 4 of this EA/IS for further discussion of these four parcels.

The boreholes were advanced and sampled using hydraulic direct-push methods to total depths of approximately 3 meters (10 feet) below ground surface. A total of 156 soil samples were collected and analyzed from the 53 borings. The samples were selectively analyzed for:

- Total Petroleum Hydrocarbon, oil and grease (TPHog).
- Total Petroleum Hydrocarbon, gasoline (TPHg)
- Total Petroleum Hydrocarbon, diesel (TPHd)

- Total Petroleum Hydrocarbon, oil (TPHo)
- Title 22 Metals
- Volatile Organic Compounds (VOC)
- Semi-Volatile Organic Compounds (SVOC)

The depth to groundwater at the project site was determined to be approximately 21 meters (~70 feet). However, based on the proposed project's excavation footprint, as well as Ninyo and Moore's detailed workplan research, it is not likely that groundwater will be encountered during excavation and construction. Thus groundwater sampling was not collected during the assessment activity.

For the results of the SI, please see Section 4, Checklist Item #7 – Hazards and Hazardous Materials.

3.6 Biological Resources

The proposed project area was evaluated for sensitive biological resources including native vegetation, as well as sensitive, threatened, endangered, and proposed plant and animal species habitat. It was concluded that the proposed project area is in a highly urbanized area in the City of Torrance, outside the vicinity of any natural drainages, streams, or creeks. The proposed project area was deemed absent of any native vegetation, and absent of any as sensitive, threatened, endangered, or proposed plant and animal species habitat. Furthermore, the project area is not in or near any wildlife corridors.

The biological study was based on review of aerial photographs, the proposed project plans, a site visit, and a search of the California Department of Fish and Game Natural Diversity Database (CNDDB).

3.7 Land Use and Planning

The proposed project area is located within the City of Torrance. Most of the land immediately adjacent to the Proposed Project is part of the Hawthorne Boulevard Corridor Specific Plan (HBCSP). The HBCSP zone supercedes all prior zoning for those properties located within its boundaries. The purpose of the HBCPS is to provide for the continued development, preservation and enhancement of Hawthorne Boulevard in the City of Torrance as the principal retail corridor in the City with a unique concentration and intensity of land uses unique to the City." Within the HBCSP there are seven land use sub-districts. The seven sub-districts in the HBCSP are:

- North Torrance Sub-District (NT)
- Promenade Sub-District (PR)
- Del Amo Business Sub-District One (DA-1)
- Del Amo Business Sub-District Two (DA-2)
- Meadow Park Sub-District (MP)
- Hawthorne Boulevard/Pacific Coast Highway Intersection Area District (H/PCH)

- Walteria Sub-District (WT)

Of the seven Sub-Districts, the latter three are in the immediate vicinity of the Proposed Project (less than 1 mile away):

- The **Meadowpark Sub-District** is bounded by Pacific Coast Highway to the south and 225th to 226th Street to the north. The western boundary is irregular and extends approximately 250 feet from the Hawthorne Boulevard right-of-way. The eastern boundary is also somewhat irregular, extending to Madison Street and Samuel Street. This sub-district contains the Skypark Redevelopment Project and Meadowpark Redevelopment Project areas. Allowable land uses within the sub-district include housing, retail, medical, dining, light industrial and office uses. It is the location of the Torrance Memorial Medical Center.

- The **Hawthorne Boulevard/ Pacific Coast Highway Intersection Area Sub-District** is bounded by 242nd Street to the south and 240th Street to the north. The western boundary is Ocean Avenue and the eastern boundary is midway between Hawthorne Boulevard and Madison Street. Allowable land uses within the sub-district include commercial, office, dining, entertainment, and retail. Residential uses are not permitted at the PCH/Hawthorne Bl Intersection Area Subdistrict. It is the location of the intersection of Pacific Coast Highway and Hawthorne Boulevard, the southern gateway to the City of Torrance.

- The **Walteria Sub-District** is bounded by Torrance City Limits to the south and 242nd Street to the north. The eastern boundary encompasses all commercial properties adjacent to Hawthorne Boulevard and Newton Street. The Western Boundary is the rear property lines of Hawthorne Boulevard properties. Allowable land uses within the sub-district include a mixture of retail shops, restaurants, housing, and offices. There is a high proportion of small, specialty commercial businesses with small-scale traditional storefronts within this subdistrict. It is the location of the southern boundary of the City of Torrance and the entrance from the Palos Verdes Penninsula.

Hawthorne Boulevard traverses the South Bay in a north-south direction. Pacific Coast Highway crosses Hawthorne Boulevard diagonally with a northwest-southeast trend. The Torrance Municipal Airport is located to the east within the immediate vicinity of the project area; the Los Angeles International Airport (LAX) is located approximately 22.4 km (14 miles) to the north; King Harbor is approximately 8 km (5 miles) to the northwest; the City of Palos Verdes Estates is approximately .62 km (1 mile) to the south; the City of Rolling Hills Estates is approximately 2.4 km (1.5 miles) to the south; the City of Rancho Palos Verdes is approximately 4 km (2.5 miles) to the southwest; the City of Rolling Hills is approximately 5.6 km (3.5 miles) to the south; the City of Redondo Beach is approximately 4.8 km (3 miles) to the northwest; the City of Manhattan Beach is approximately 16 km (10 miles) to the northwest; and downtown Los Angeles is approximately 28.8 km (18 miles) to the north. To the east of the Proposed Project approximately 11.2 km (7 miles) is State Route 110 and approximately 38.4 km (24 miles) to the east is State Route 405. The Pacific Ocean is approximately 7.2 km (4.5 miles) to the west.

3.8 Social and Economic Resources

The City of Torrance consists primarily of middle to middle-upper class households. The median household income in the City of Torrance is approximately $56,489, which is much higher than the medians for the City of Los Angeles $36,687 and the County of Los Angeles $42,189. The median age for the City of Torrance is 38.7. There are approximately 54,542 total households in the City of Torrance and there are approximately 2.5 persons per household. The median value of an owner occupied household is approximately $320,700, while the median rent for a renter occupied household is approximately $903.

In the City of Torrance, minority groups constitute approximately 44.7% of the population, while for the City of Los Angeles, minorities total approximately 67%. The White, Black, Asian, American Indian, Hispanic, multi-racial, and other populations in the City of Torrance constitute 52.4%, 2.1%, 28.7%, 0.3%, 12.8%, 0.3%, and 3.5% of the total population, respectively (U.S. Census Data, 2000). As can be seen, whites constitute the majority, and Asians constitute the largest minority in the City of Torrance.

The CEQ 1997:19 defines "minority" is as individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander, Black, not of Hispanic origin; or Hispanic.

3.9 Public Services and Facilities

Public services and facilities include schools, fire stations, police stations, and parks and recreational facilities. The City of Torrance Fire Department provides fire prevention, fire suppression, and life safety services throughout the City of Torrance. The Fire Department's jurisdiction extends by a Mutual Aid Agreement to eight South Bay cities. The Fire Department is responsible for all pipeline fire suppression operations. The Torrance Police Department provides law enforcement services throughout the City of Torrance. The Los Angeles County Sheriff's Department provides law enforcement services throughout the unincorporated areas of Los Angeles County.

The Torrance Unified School District provides primary and secondary public education services in the area. The City of Torrance, Parks and Recreation Department operates parks and recreational facilities in the area. Walteria Park, one (1) of forty (40) parks in the City of Torrance, is in the immediate vicinity of the proposed project area. The Torrance Public Library provides library services in the City of Torrance. There are no fire stations or police stations along the Pacific Coast Highway or Hawthorne Boulevard proposed project segments. Torrance Memorial Medical Center, Torrance Municipal Airport, a U.S. Post Office, Walteria Branch Library and Walteria Elementary School are located in the immediate vicinity of the proposed project.

3.10 Cultural and Paleontological Resources

The results of a records search of Caltrans District 7 Files and the South Central Coastal Information Center at California State University, Fullerton, revealed that no archaeological resources were recorded within the project Area of Potential Effect (APE). A field inspection was conducted, and the above was confirmed. Based on this, no archaeological impacts are anticipated and no further archaeological investigations are warranted.

For the proposed project, the historic architectural survey formally evaluated eight properties within the APE. None of the properties met the National Register criteria. There were no buildings previously determined eligible for inclusion in the National Register of Historic places within the project area. No properties have been given formal local designations of historical significance. Twenty post-1956 properties were treated in accordance with the *Caltrans Interim Policy for the Treatment of Buildings Constructed in 1957 or Later*. In accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, none of the properties are historical resources for the purposes of CEQA.

The principle stratigraphic unit that will be impacted by excavation is Holocene Alluvium. Deeper Pleistocene Alluvium within the Los Angeles Basin is recorded to have produced vertebrate fossils in the vicinity of the proposed project area. However, any excavation at the proposed project site is anticipated to be less than five (5) feet, well above the depth level documented for the fossil bearing units.

3.11 Visual Environment

Visual resources of the proposed project area and surrounding areas are a function of both the natural and the built environment. Resources associated with the natural environment include the scenic views of the Palos Verdes Peninsula and the Pacific Ocean. The Palos Verdes Peninsula is a prominent feature which dominates the visual character of the area, and represents the primary scenic resource. The Santa Monica Mountains are visible in the far distance on a clear day.

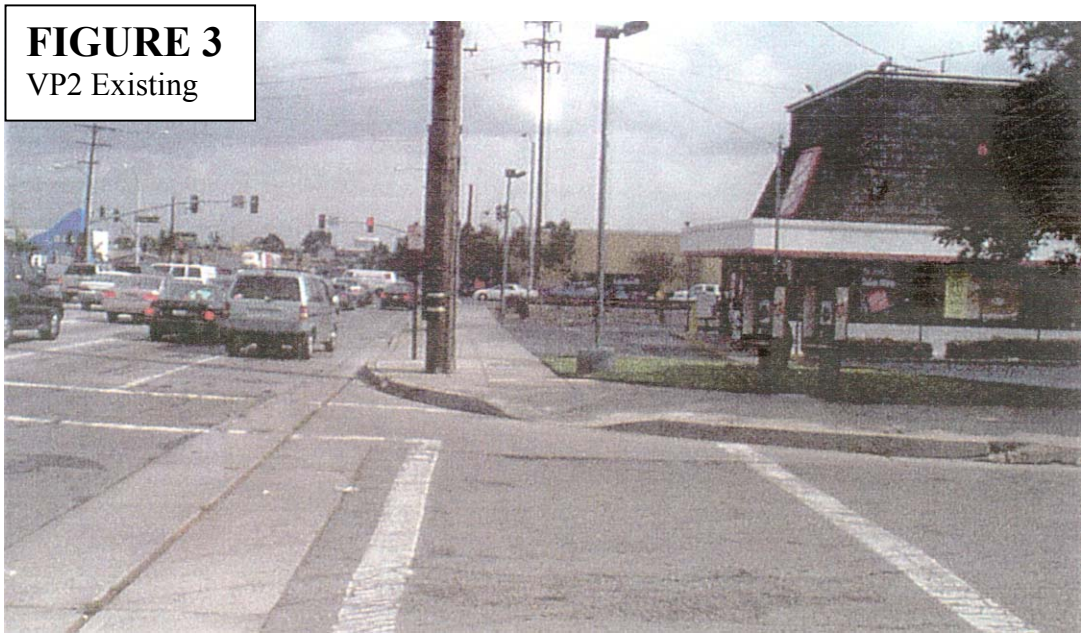
The intersection of PCH and Hawthorne Boulevard is a congested area of 1950's suburban commercial development. Three of the four corners have commercial development fronting both Routes with parking in the rear. The fourth corner is dominated by shopping warehouse stores such as Best Buy and Office Max, with parking along the front on PCH.

The Visual Quality Analysis (VQA) of the proposed project site was performed according to the criteria in the Visual Impact Assessment for Route Projects (USDOT, FHA c. 1979). The visual quality was analyzed for each viewpoint (VP) selected in terms of vividness, intactness and unity. Then the same viewpoints were analyzed for the proposed improvements using in part, photo-simulations of the new construction in place.

Viewpoints were selected on the north and southbound lanes where the proposed intersection widening would most effect the existing commercial development (Figures 2 and 3). These two viewpoints were also very representative of the entire proposed project area as a whole.

FIGURE 2
VP1 Existing

FIGURE 3
VP2 Existing



As can be seen in Figure 2, "Viewpoint 1 (VP1) Existing" presents the existing visual condition on southbound PCH approaching Hawthorne Boulevard. As one can tell, the visual quality of this viewpoint is below average. The terrain is flat, featureless, already heavily impacted, and almost devoid of any vegetation.

As can be seen in Figure 3, "Viewpoint 2 (VP2) Existing" presents the existing visual condition on northbound Hawthorne Boulevard approaching PCH. As can also be seen from this viewpoint, there is a similarity to VP1. The terrain is flat, featureless, already heavily impacted, and almost devoid of any vegetation.

3.12 Noise Environment

3.12.1 Existing Noise Environment

A field noise investigation was conducted to determine existing noise levels and to gather information in order to develop and calibrate the traffic noise model that was used for predicting future noise levels. Existing noise levels were recorded at four locations, which are acoustically representative of the entire area within the limits of the proposed project.

Land Use and Sensitive Areas

The existing land use within the project limits is comprised of single-family residences, a park and commercial developments, some with outside frequent human use. There is a residential area facing the Pacific Coast Highway (PCH) within the limits of this project. Walteria Park, owned and operated by the City of Torrance, is also located within the project limits and it has an area of frequent human use along the PCH. There are several commercial developments within the project limits along Route 1. There are two commercial developments that have an outside eating area with frequent exterior human activity. The first is Starbucks Coffee Company located on the northeast corner of the intersection (3737 PCH). The second is Taco Bell located on the eastbound side of PCH (3830 PCH).

Existing Traffic Noise

The noise environment in the project area is dominated by traffic travelling the Pacific Coast Highway and Hawthorne Boulevard. Table 10 summarizes the existing sound level measurements taken in the project area. The measurement results indicate that existing traffic noise level for the residential area is 65 dBA-L_{eq}(h) and 63 dBA-L_{eq}(h) for the park. The existing noise levels at Starbucks and Taco Bell are 66 dBA-L_{eq}(h) and 68 dBA-L_{eq}(h), respectively. Taco Bell is near the noise measurement site of the park, however, the noise level at Taco Bell is higher than that of the park site. The park site is further away from the Pacific Coast Highway and partially blocked by commercial development. Please see Appendix 2 for a discussion of the Fundamentals of Traffic Noise, Federal and State Noise Regulations, and Study Methodology**.** Complete meter readings are also included in the Appendix 2.

TABLE 10

Traffic Noise Measurements & Modeling Results

Receiver	Location	Type of Development # of Units Represented	Noise Abatement Category dBA - Leq[h]	Field-Measured Noise Level dBA - Leq[h]	Modeled Noise Level dBA - Leq[h]	Traffic Noise Model Calibration Factor dBA - Leq[h]	Existing Walls Private Property (m)	Existing Walls State Property (m)	Future Predicted Worst-Noise-Hour Noise Level dBA - Leq[h]	Noise Increase dBA - Leq[h]	Impact Type E=Exceeds N=No Impact
Site # 1	3360 242nd St.	Residential 3	B (67 dBA)	65	64	1	-	-	67	2	E
Site # 2	3737 PCH *	Commercial 1	C (72 dBA)	66	68	-2	-	-	68	2	N
Site # 3	3855 242nd St.	Park 1	B (67 dBA)	63	67	-4	-	-	65	2	N
Site # 4	3830 PCH *	Commercial 1	C (72 dBA)	68	71	-3	-	-	70	2	N
CBNL**	3665 244th St.	-	- -	55	-	-	-	-	-	-	-

* PCH = Pacific Coast Highway (Route 1)
** Community Background Noise Level

4-ENVIRONMENTAL EVALUATION & DISCUSSION

4. ENVIRONMENTAL EVALUATION & DISCUSSION

4.1 Introduction

This Section, in conjunction with Section 3- Affected Environment, constitutes the scientific and analytic basis for the comparison of effects presented in Section 2- Description of Proposed Project and Alternatives. The Environmental Significance Checklist on the following pages was used to identify physical, biological, social and economic factors that may be affected by the proposed project.

4.2 List of Technical Studies/Reports

The following technical studies and environmental documents have been prepared and incorporated by reference in this environmental evaluation. These reports are available for review at the Caltrans District 7 Office, 120 South Spring Street, Los Angeles, California.

- Negative Archaeological Survey Report, June 2002
- Paleontology Report, June 2002
- Geotechnical Report, March 2002
- Historic Property/Architecture Survey Report, September 2002
- Location Hydraulic Study, March 2002
- Natural Environmental Study Report, April 2002
- Traffic Noise Investigation, April 2002
- Hazardous Waste Site Investigation, September 2002
- Traffic Study, January 16, 2002
- Visual Impact Analysis, May 2002
- Relocation Impact Study, July 2002
- Air Quality Analysis, June 2002

4.3 Environmental Significance Checklist

The Environmental Significance Checklist is used to identify physical, biological, social and economic factors which could potentially be impacted by a proposed action. In many cases, some of the above mentioned factors are not affected simply because of the nature of the action. In other cases, the technical studies performed to study certain factors which could potentially be affected by the proposed action clearly indicate that the action would pose no impact to those factors. In the Checklist, those factors are check marked "No Impact". If further clarification is merited, the items will be immediately followed by a discussion.

In other cases, technical studies indicate that one or more of the above mentioned factors will be impacted by the proposed action. In the Checklist, these factors are check marked either:

- "Less Than Significant Impact"
- "Less Than Significant With Mitigation"
- "Potentially Significant Impact"

These items are always followed by a discussion regarding the significance of the impact as defined by CEQA. In so doing, the Checklist achieves the important statutory goal of integrating the requirements of CEQA with the environmental requirements of other laws such as NEPA.

The factors checked below could be potentially affected by the proposed project:

☒	Aesthetics	☐	Agricultural Resources	☒	Air Quality
☐	Biological Resources	☐	Cultural Resources	☐	Geology / Soils
☒	Hazards & Hazardous Materials	☐	Hydrology / Water Quality	☐	Land Use / Planning
☐	Mineral Resources	☒	Noise	☐	Population / Housing
☒	Public Services	☒	Recreation	☒	Transportation / Traffic
☐	Utilities / Service Systems	☒	Business Relocation	☐	Mandatory Findings of Significance

1. AESTHETICS

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

b) Affect any scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, or result in the obstruction of any scenic vista or view open to the public, or creation of an aesthetically offensive site open to public view?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒

Answer to checklist items (#1a-c):

Some street side planting areas containing grass and mature trees may be eliminated by the proposed project since after construction, the intersection will be a larger version of what it is now.

As mentioned in Section 3 of this document, the visual quality was analyzed for selected viewpoints in terms of vividness, intactness and unity since they were deemed most representative of the entire proposed project area. Then the same viewpoints were analyzed for the proposed improvements using in part, photo-simulations of the new construction in place.

The selected viewpoints VP1 and VP2 were selected on the south and northbound lanes where the proposed intersection widening would most effect the existing commercial development. As can be seen in Figures 4 and 5, the existing visual quality of each viewpoint was found to be below average. The terrain was flat, featureless, already heavily impacted, and almost completely devoid of any vegetation. It was concluded that the change to the visual quality of the project area after the proposed construction is negligible to viewpoints VP1 and VP2.

FIGURE 4
VP1 Proposed

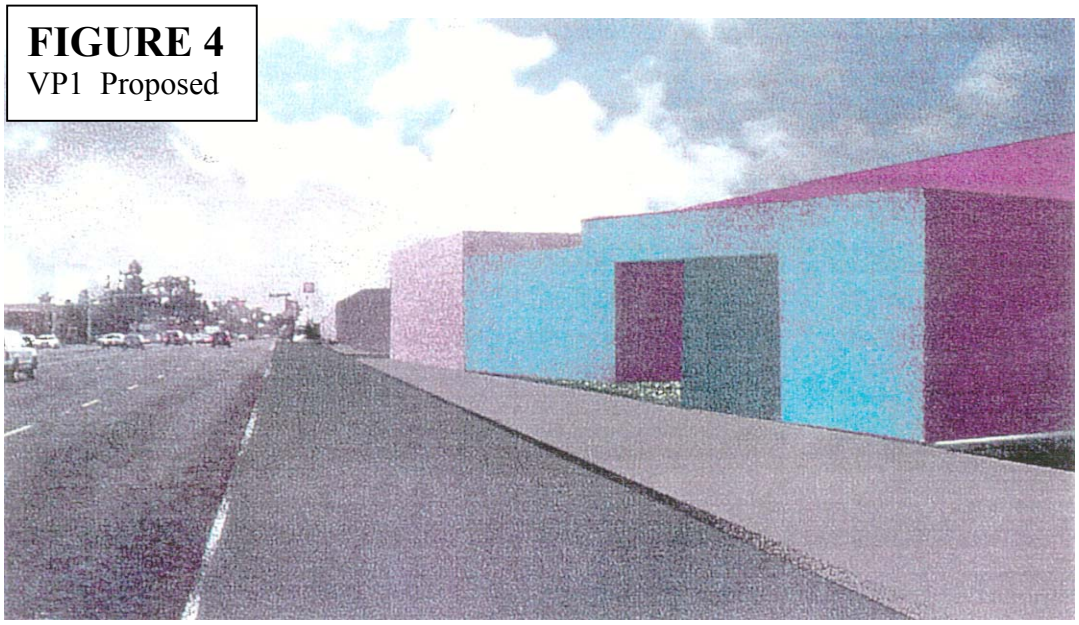
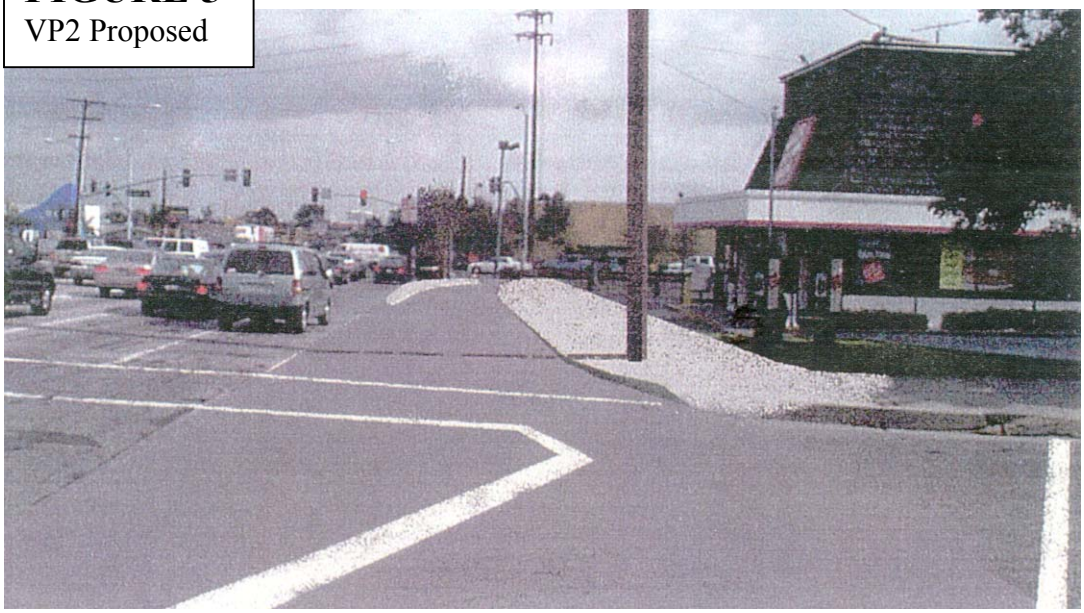


FIGURE 5
VP2 Proposed



It was thus concluded that the proposed project will not have any adverse effects on any scenic vistas, or affect any scenic resources such as trees, rock outcroppings, or result in the obstruction of any scenic vistas or views open to the public. The proposed project will not create an aesthetically offensive site open to public view, or substantially degrade the existing visual character or quality of the site and its surroundings. Historic buildings within a state scenic highway will not be impacted either. Historic/Cultural Resources are discussed later in this section, in Checklist Item (#5).

AVOIDANCE AND MINIMIZATION MEASURES (VISUAL AESTHETICS):

- The Caltrans Division of Environmental planning shall consult the City of Torrance and the Caltrans Office of Landscape Architecture regarding the feasibility and cost of adding uniform street trees along the proposed project segment at a reasonable interval (50 feet on center) since mature trees will be removed because of the proposed project. The Department shall propose that the trees be drought tolerant and a size to match the scale of the intersection. Native trees shall be considered. The Department shall also propose that the City of Torrance maintain the trees, as it does the existing trees.
- The Department and the City of Torrance are currently exploring the feasibility and cost of "undergrounding" the utilities in and around the intersection in order to improve the visual aesthetics of the area.

2. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Signi-ficant Impact	No Imp-act
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?	☐	☐	☐	☒
d) Reduction in acreage of any agricultural crop or commercial timber stands, or affects prime, unique, or other farmland of State or local importance?	☐	☐	☐	☒

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard?	☐	☐	☐	☒

Answer to checklist items (#3a&b):

The proposed project will not violate, conflict with, or obstruct implementation of any air quality plans or standards. The proposed project is consistent with the 2001 Regional Transportation Plan (RTP) prepared by the Southern California Association of Governments (SCAG). SCAG's RTP was adopted by the SCAG Regional Council on May 5, 2001 and approved by the U.S. Department of Transportation (FHWA/FTA) on June 8,2001. The Mohave Desert (San Bernadino County portion of the Mojave Desert Air Basin) and the Coachella Valley portion of the Salton Sea Air Basin received federal approval for Particulate Matter (PM_{10}) conformity determination on August 5, 2001.

Air pollutant emissions associated with the project will me mainly limited to temporary construction related air quality nuisances. These emissions would only occur over the short-term from construction activities such as fugitive dust from site preparation, grading, and emissions from construction equipment exhaust. These temporary air quality impacts can and will be lessened by the Avoidance and Minimization Measures discussed later in the Section. Long-term local Carbon Monoxide (CO) emissions associated with congested intersections however, cannot be avoided.

The proposed project will improve traffic movement in the general vicinity, thereby lowering the concentration of pollutants emitted by the motor vehicles. Thus, no significant regional or local air quality impacts are anticipated over the long-term.

The proposed project is not expected to generate any additional traffic, and regional traffic trips are expected to remain the same. The highway is simply a conduit to enable people to get from one point to another. The highway itself does not generate additional traffic. The traffic generators are residences, schools, businesses, shopping centers, manufacturing areas, recreational areas, new developments, etc.

The following discusses the potential emission generating activities associated with the proposed project and their significance.

Construction Related Air Quality Impacts

Equipment Exhausts and Related Activities

Construction activities produce combustion emissions from various sources such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions. Emissions from construction equipment generated from site grading activities are estimated using EPA AP-42 emission factors and SCAQMD CEQA Air Quality Handbook.

Fugitive Dusts

Fugitive dust emissions are generally associated with demolition, land clearing, exposure, and cut and fill operations. Dust generated during construction would vary substantially, depending on the level of activity, the specific operations, and weather conditions. Nearby sensitive receptors and on-site workers may be exposed to blowing dust, depending upon prevailing wind conditions. Fugitive dust would also be generated as construction equipment travels on unpaved roads or on the construction site.

PM_{10} emissions from grading operations during a peak grading day are based on assumptions and experience on similar sized projects. Construction of the proposed project will occur in sections. Only three corners will be impacted by the expansion of the intersection. Construction will only occur at one corner at a time. Each corner will cover approximately one acre. It is assumed that the entire corner will be graded all at once. The following assumptions were made

in the calculations of the fugitive dust from construction activities:

- The construction activities will have medium activity level and operate eight-hours per day,
- The project site contains at worst-case moderate silt contents,
- The project site has semi-arid climate, and
- The maximum disturbed area is one acre.

The fugitive dust emission factor for such a construction site used in this air quality analysis is derived from the Environmental Protection Agency's (EPA) AP-42 document, Section 13.2.3.3, Heavy Construction Operations, January 1995. Although the document provides an emission factor for Total Suspended Particulate (TSP) emission only, which is substantially greater than PM_{10} emissions, this emission factor was assumed to be the same in estimating PM_{10} emissions as a worst-case scenario. The TSP emissions rate prescribed in the document is 1.2 tons per acre-month (30 days) of activity or approximately 80 pounds per acre-day. Daily fugitive dust emission from the project is calculated using the approved EPA emission rate multiplied by the active project site dimensions.

The combination of the PM_{10} fugitive dust and PM_{10} exhaust emissions from construction equipment are added together and compared to the SCAQMD daily threshold for PM_{10} to determine whether the project has a significant impact on air quality. Table 11 lists fugitive dust emission and construction equipment exhausts. Table 11 shows that the total construction emissions would not exceed the SCAQMD daily construction thresholds for any of the criteria pollutants, therefore, the proposed project will not have a significant impact on local air quality.

Long-Term Microscale (CO Hot Spot) Analysis

The primary mobile source pollutant of local concern is CO. CO concentration is a direct function of vehicle idling time and, thus, traffic flow conditions. CO disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthy levels affecting local sensitive receptors (i.e., residents, school children, the elderly, hospital patients, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentration, modeling of CO concentrations is recommended in determining a project's effect on local CO levels.

Existing CO concentrations in the immediate project vicinity are not available. However, ambient CO concentrations monitored at the Hawthorne station are available for the previous years. EPA's criteria recommend using the highest concentration from the last two years. As shown in Table 9 (in Section 3), year 2000 has the highest recorded one-hour concentration of 8.7 ppm (state standard is 20 ppm) and eight-hour concentration of 7.1 ppm (state standard is 9 ppm). The SCAQMD provides ambient CO projections for the different monitoring stations within the Basin. The CO concentrations for year 2020 at the Hawthorne station are projected to have a one-hour concentration of 7.3 ppm and an eight-hour concentration of 6.1 ppm. The future CO ambient background concentrations are available on the SCAQMD website. These CO

TABLE 11

Construction Equipment Exhaust and Fugitive Dust Emissions

					CO		ROC		NO_x		SO_x		PM_{10}		
Source [1]	Parameter 1 [1]	Parameter 2 [2]	Parameter 3 [1]	Parameter 4	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Emission Factor	Emission (lbs/day)	Notes
CONSTRUCTION EQUIPMENT:															
Site Grading															
Scraper	265	0.66	8	1	0.011	15.4	0.001	1.4	0.019	26.6	0.002	2.8	0.0015	2.1	[3]
(615C Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
Dozer	200	0.59	8	1	0.011	10.4	0.002	1.9	0.023	21.7	0.002	1.9	0.001	0.9	[3]
(D7G Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
Loader	200	0.465	8	1	0.015	11.2	0.003	2.2	0.022	16.4	0.002	1.5	0.001	0.7	[3]
(960F Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
Backhoe Excavator	82	0.465	8	1	0.015	4.6	0.003	0.9	0.022	6.7	0.002	0.6	0.001	0.3	[3]
(426B Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
Motor Grader	155	0.575	8	1	0.008	5.7	0.003	2.1	0.021	15.0	0.002	1.4	0.001	0.7	[3]
(135H Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
Compactor	102	0.59	8	1	0.015	7.2	0.003	1.4	0.022	10.6	0.002	1.0	0.001	0.5	[3]
(CS-433B Model)	hp	load factor	hours/day	unit	lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		lb/hp-hr		
<SUBTOTAL>						54.5		9.9		97.0		9.2		5.2	
Fugitive Dust													80	80	[4]
													lb/acre-day		
TOTAL						54.5		9.9		97.0		9.2		85.2	
SCAQMD Significant Thresholds (pounds/day)						550		75		100		150		150	
Exceed SCAQMD Thresholds (Yes/No)						No		No		No		No		No	

NOTES:

[1] Construction equipment engine sizes were derived from Caterpillar Performance Handbook Edition 26, October 1995. Hours of operation, haul distances, and travelling speed are assumed.

[2] Load factors are from SCAQMD's CEQA Air Quality Handbook (SCAQMD, 1993), Table A9-8-D.

[3] Heavy-duty diesel vehicle emission factors for construction equipment derived from SCAQMD, CEQA Air Quality Handbook, 1993, Table A-9-8-B.

[4] Fugitive dust emissions are calculated using methodology described in AP-42, Section 13.2.3.3, Heavy Construction Operations, January 1995.

concentrations were used in the model to predict ambient CO concentrations for year 2020.

The highest CO concentrations occur during peak traffic hours, which would best represent a worst-case analysis for the calculation of CO impacts. Modeling of the CO hot spot analysis was based on the p.m. peak hour traffic volumes for existing and future conditions with and without project (please see Section 1 of this document). The traffic volumes provided traffic data for all the alternatives for the years 2002 and 2020. CO concentrations were calculated for the one-hour averaging period and compared to the state one-hour CO standard of 20 ppm. CO eight-hour averages were calculated from the one-hour CO calculations, using techniques outlined in the Transportation Project-Level Carbon Monoxide Protocol (December 1997). The technique recommends using a persistence factor of 0.7 to calculate the CO eight-hour concentrations from the one-hour CO concentrations. CO concentrations are expressed as ppm at each receptor location. The receptors are placed at the sidewalks located at the corners of the intersection as this would present a worst-case scenario.

The impact of local CO concentrations were assessed with CARB approved CL4 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections. This model is designed to identify localized concentrations of CO, often termed "hot spots."

Data in Table 12 illustrate the different impact levels of CO concentrations at the PCH/Hawthorne Bl intersection analyzed for the existing without project and the future with project. The existing condition was analyzed using traffic data and vehicle emission factors for the year 2002.

Alternatives 2 and 3 were analyzed using formulated traffic data and projected vehicle emission factors for the year 2020. The decrease in CO concentrations as a result of the proposed project is also shown in Table 12. The one-hour CO concentration for the future with project scenarios would be below the state and federal standards. The eight-hour CO concentration for the future with project scenarios would exceed the state and the federal eight-hour standards. However, CO concentrations are declining rapidly through fleet turnover and gasoline formulation. Furthermore, the decrease in CO concentrations would improve air quality in the project vicinity and is determined not to have any significant local CO impacts in the project vicinity. As shown in Table 12, the implementation of Alternative 2 or 3 would lower CO concentrations whereas keeping the intersection the same would not, therefore, it is recommended that either Alternatives 2 or 3 (the proposed project) be implemented.

Cumulative Air Quality Impacts

Construction Emissions

A number of individual projects in the general vicinity of the Torrance area are simultaneously under construction with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction may result in substantial short-term increases in air pollutants. This would contribute to short-term (temporary) cumulative air quality impacts. However, the

TABLE 12

Carbon Moxide Hotspots Analysis			
Scenarios	Receptor Location	CO Predicted Concentrations[1]	CO Concentrations[1] 1-hour / 8-hour
Existing Without Project[2]	SE	6.3	15.0 / 11.5
	NE	4.9	13.6 / 10.5
	NW	5.0	13.7 / 10.6
	SW	6.9	15.6 / 11.9
Alternative 1 Without Project[3]	SE	6.0	13.3 / 10.3
	NE	4.5	11.8 / 9.3
	NW	5.0	12.3 / 9.6
	SW	7.1	14.4 / 11.1
Alternative 2 With Project[3]	SE	4.0	11.3 / 8.9
	NE	3.8	11.1 / 8.8
	NW	4.7	12.0 / 9.4
	SW	4.5	11.8 / 9.3
Alternative 3 With Project[3]	SE	3.8	11.1 / 8.8
	NE	3.3	10.6 / 8.4
	NW	4.4	11.7 / 9.2
	SW	4.2	11.5 / 9.0
Footnote:			
1 - CO concentrations are in parts per million (ppm).			
2 - Includes highest ambient 1-hour CO concentration of 8.7 ppm and highest ambient 8-hour CO concentration of 7.1 ppm from the last two years at the Hawthorne air monitoring station.			
3 - Includes SCAQMD projected 1-hour CO concentration of 7.3 ppm and the 8-hour CO concentration of 6.1 ppm from the Hawthorne air monitoring station for year 2020.			

implementation of the standard conditions during site grading activities would further reduce fugitive dust emissions.

Project Emissions

Currently, the Basin is in non-attainment for O_3, CO, and PM_{10}. Construction of the proposed project, in conjunction with other planned developments within the cumulative study area and the subregion, would contribute to the existing non-attainment status. The growth assumptions used to determine future baseline conditions in the 1997 AQMP included construction of the proposed project; however, any development results in additional emissions, which must be offset by control strategies outlined in the 1997 AQMP. Thus, the control strategies outlined in the 1997 AQMP shall be adequately implemented to prevent the proposed project from exacerbating the non-attainment of air quality standards within the subregion and Basin, or contribute to adverse cumulative air quality impacts. Further discussion on cumulative impacts can be found later in this Section.

Adverse Project Impacts
The proposed project would not have a significant impact on air quality as shown above, but overall impacts due to short-term (temporary) construction emissions will contribute to the overall existing non-attainment status. Standard conditions and mitigation measures have been identified to reduce these impacts. A list of the Avoidance and Minimization measures proposed can be found below.

Cumulative Impacts
The project is located in a non-attainment area in which any project that contributes emissions to the Basin has a cumulative impact on the air quality of the Basin. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, will contribute to unavoidable cumulative impacts on air quality.

However, any air quality cumulative impacts as a result of the proposed project will be limited to construction related activities only, and thus will be temporary and insignificant in nature. As mentioned previously, highways are simply conduits that enable vehicular traffic to move from one point to another. A highway itself does not generate traffic, thereby generating more emissions as would new development (i.e. new business or apartment building). Thus significant cumulative impacts are not anticipated. Also please see Checklist Item (#17b).

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Result in changes in air movement, moisture, or temperature, or any climatic conditions?	☐	☐	☐	☒
d) Result in an increase in air pollutant emissions, adverse effects on or deterioration of ambient air quality?	☐	☐	☒	☐
e) Results in the creation of objectionable odors?	☐	☐	☐	☒

Answer to checklist items (#3c,d,&e):

The air quality analysis concluded that the proposed project will not result in any changes in air movement, moisture, temperature, climatic conditions, or result in an increase in air pollutant emissions. The proposed project will not have an adverse effect on or result in the long-term deterioration of ambient air quality, or result in the creation of objectionable odors.

AVOIDANCE AND MINIMIZATION MEASURES (AIR QUALITY)

- The project will be required to comply with regional rules, which would assist in reducing short-term air pollutant emissions. The SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 402 prohibits dust from creating a nuisance off site. These dust suppression

techniques are summarized below. Implementation of these dust suppression techniques, as required by the SCAQMD, can reduce the fugitive dust generation (and thus the PM_{10} component) by 50 to 75 percent. Compliance with these rules would reduce impacts on nearby sensitive receptors.

- Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or use a soil stabilizer to minimize blowing dust.
- All active portions of the construction site shall be watered to prevent excessive amounts of dust.
- On-site vehicle speed shall be limited to 15 mph.
- All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.
- All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.
- All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 episodes.
- All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized at all times.

Avoidance and Minimization measures are not required for PM_{10} emissions because there will not be a significant impact from PM_{10} emissions. Mitigation measures are not available for CO because there are no feasible measures available. CO should reduce in the future due to improvement in fuel and mobile technology.

4. BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

b) Have a substantial adverse effect on any wetlands, riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or micro fauna)?	☐	☐	☐	☒
d) Introduction of new species of plants into an area, or result in a barrier to the normal replenishment of existing species?	☐	☐	☐	☒
e) Introduction of new species of animals into an area, or result in a barrier to the migration of movement of animals?	☐	☐	☐	☒
f) Removal or deterioration of existing fish or wildlife habitat?	☐	☐	☐	☒
g) Conflict with any applicable habitat conservation plan, natural community conservation plan or other approved local, regional or state habitat plan?	☐	☐	☐	☒
h) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
i) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Answer to checklist items (#4a-i):

The proposed project area is situated in a highly urbanized area in the City of Torrance, outside the vicinity of any natural drainages, streams, or creeks. The proposed project area was deemed absent of any native vegetation, and absent of any as sensitive, threatened, endangered, and proposed plant and animal species habitat, aquatic or terrestrial. The proposed project will not adversely impact wetlands, wildlife corridors, species diversity, or impede any habitat conservation efforts.

AVOIDANCE AND MINIMIZATION MEASURES (BIOLOGICAL RESOURCES)

- As with all of the Department's projects, water quality Best Management Practices (BMPs) shall be implemented into the final construction contract so as minimize and avoid any water quality degradation as a result of the proposed project construction
- All vegetation to be removed by the proposed project shall be done outside of the bird nesting season (March 1st – September 30th) so as to avoid impacts to nesting birds
- The Caltrans Division of Environmental planning shall consult the City of Torrance and the Caltrans Office of Landscape Architecture regarding the feasibility and cost of adding

uniform street trees along the proposed project segment at a reasonable interval (50 feet on center) since mature trees will be removed because of the proposed project. The Department shall propose that the trees be drought tolerant and a size to match the scale of the intersection. Native trees shall be considered. The Department shall also propose that the City of Torrance maintain the trees, as it does the existing trees.

5. CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒

Answer to checklist item (#5a):

A historic architectural survey was prepared for the proposed project. It was concluded that none of the impacted properties met the National Register criteria. There were no buildings previously determined eligible for inclusion in the National Register of Historic places, and none of the properties had been given formal local designations of historical significance for the purposes of Section 106 or NEPA. And in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, none of the properties are historical resources for the purposes of CEQA. Lastly, twenty post-1956 properties were treated in accordance with the *Caltrans Interim Policy for the Treatment of Buildings Constructed in 1957 or Later.*

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒

Answer to checklist item (#5b):

The results of a records search of Caltrans District 7 Files and the South Central Coastal Information Center at California State University, Fullerton, revealed that no archaeological resources were recorded within the project Area of Potential Effect (APE). A field inspection was conducted, and the above was confirmed. Based on this, no archaeological impacts are anticipated and no further archaeological investigations are warranted.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Answer to checklist item (#5c):

The terrain is flat, featureless, already heavily impacted, and almost completely devoid of any vegetation or unique geologic features. The principle stratigraphic unit that will be impacted by excavation is Holocene Alluvium. Deeper Pleistocene Alluvium within the Los Angeles Basin is recorded to have produced vertebrate fossils in the vicinity of the proposed project area. However, excavation at the proposed project site is anticipated to be less than five (5) feet, well above the depth level documented for the fossil bearing units. Thus direct or indirect impacts to paleontological resources are not anticipated.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

Answer to checklist item (#5d):

Historic records do not indicate the past presence cemeteries or Native American burial grounds within the proposed project area.

AVOIDANCE AND MINIMIZATION MEASURES (BURIED RESOURCES)

- In the unlikely event that buried archaeological materials are encountered during excavation and construction, it is the Department's policy to stop work until a qualified archaeologist can evaluate the nature and significance of the find.
- In the unlikely event that paleontological resources are uncovered during excavation and construction, it is the Department's policy to stop work until a qualified paleontologist can evaluate the nature and significance of the find.

6. GEOLOGY AND SOILS

Would the project: **a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failures and hazards, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒

Answer to checklist item (#6a):

There are no geologic or geotechnical conditions that would preclude the construction of the proposed project. Caltrans builds to current earthquake standards and will use best engineering practices to minimize damage from ground shaking. These standards have been established to reduce the damage from seismic activity, which will reduce the potential for impacts to the public.

As mentioned in Section 3, the proposed project area is located in a seismically active area. The geologic processes that have caused earthquakes in the past can be expected to continue. Ground shaking is the primary cause of structural damage during an earthquake; it is to be considered the most likely damage-producing earthquake phenomena in the area. The magnitude, duration and vibration frequency characteristics will vary greatly, depending upon the particular causative fault and its distance from the project area.

An analysis of fault rupture hazard for a particular fault requires that the fault be located exactly, and it's potential for rupture to be known if only approximately. The PCH/Hawthorne Boulevard intersection is not located within the confines of the Alquist-Priolo Earthquake Fault Zoning Act or a any previously well-defined fault trace of the Palos Verdes fault system. Thus based on the review of several geological/seismologic reports, ground rupture hazards are not considered to be a hazard for this project.

The potential for liquefaction exist when fine salts and sands are located below the water table. The water can also be perched ground water. Liquefaction has been document to affect soils to +/- 15m (50 feet) deep, during prolonged periods of ground shaking. According to the 1999 Seismic Hazard Zones Map – Torrance Quadrangle, the proposed project area is not situated within an area with potential for liquefaction.

It was thus concluded that the proposed project would not increase the exposure of people or structures to the increased risk of loss, injury, or death involving rupture of a known earthquake fault, or strong seismic ground shaking, seismic related ground failure, or liquefaction.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Result in or be affected by substantial soil erosion or siltation (whether by water or wind), or result in the loss of topsoil?	☐	☐	☐	☒

Answer to checklist item (#6b):

During construction, wind and water could result in erosion of exposed soils. However, compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements for control of erosion and implementation of sediment control measures such as Best Management Practices would reduce potential impacts. Thus, significant soil erosion and loss of topsoil during construction is not anticipated. Once completed, the proposed project would result in a similar amount or slight increase in paved area, and therefore would not contribute to soil erosion or the loss of topsoil.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks of life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Appreciably change the topography or ground surface relief features?	☐	☐	☐	☒
g) Destroy, cover, or modify any unique geologic or physical features?	☐	☐	☐	☒

Answer to checklist items (#6 c-g):

Simply by nature of the proposed project and the area it is situated in, there will be no increased risk of exposure to unstable or expansive soils or geologic units. There will be no increased risks of landslides, lateral spreading, or collapse. The project will not substantially change the topography, or destroy any unique geologic or physical features.

7. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate any published Federal, State, or local standards pertaining to hazardous waste, solid waste or litter control?	☐	☐	☐	☒

Answer to checklist item (#7a):

As mentioned in Section 3, a Site Investigation (SI) was conducted to evaluate the potential existence of soil contamination caused by past and present land uses. An Initial Site Assessment (ISA) concluded that hazardous waste contamination within the proposed project area was a possibility. The SI studied the presence and concentration of contaminants for which there are established regulatory limits. This would allow the Department to estimate the volume of soil impacted, as well as the cost for remedial activities. The investigated parcels, since they are proposed for either full or partial acquisition in order to accommodate the proposed project, were:

- 7378-010-036, Starbucks/Panda Express
- 7378-010-039, Best Buy
- 7378-010-040, Best Buy
- 7534-001-900, Former Gas Station/ Former Auto Repair; Currently a vacant carwash
- 7534-001-901, Former Gas Station/ Former Auto Repair; Currently a vacant restaurant
- 7534-001-003, Vacant Carwash/Auto Repair/Jack-In-The-Box
- 7534-002-001, Carpet/Paint/Clothing Store
- 7534-002-008, Locksmith/Window Tint
- 7534-003-001, Restaurant
- 7534-003-003, Office Building
- 7534-004-004, Taco Bell
- 7378-009-046, EZ Lube
- 7378-009-047, Kentucky Fried Chicken
- 7378-009-048, International Grocery
- 7378-008-031, Pacific Design Lumber

The following parcels were unable to be investigated fully due to access limitations imposed by the business owners:

- 7534-002-008, Locksmith/Window Tint
- 7534-003-001, Restaurant
- 7534-001-003, Vacant Carwash/ Auto Repair/ Jack in the Box
- 7534-002-001, Carpet/Paint/Clothing Store

Thus these parcels will have to be studied at a later date. The Department is currently in the process of obtaining a court order in order to access and study them. For a comprehensive table of the right of way acquisition needs of the proposed project, please refer to checklist item (#11b).

The Department contracted Ninyo and Moore Consultant Inc. to conduct the above investigation. The boreholes were advanced and sampled using hydraulic direct-push methods to total depths of approximately 3 meter (10 feet) below ground surface. A total of 156 soil samples were collected and analyzed from fifty-three (53) borings. The samples were selectively analyzed for:

- Total Petroleum Hydrocarbon, oil and grease (TPHog).
- Total Petroleum Hydrocarbon, gasoline (TPHg)
- Total Petroleum Hydrocarbon, diesel (TPHd)
- Total Petroleum Hydrocarbon, oil (TPHo)
- Title 22 Metals
- Volatile Organic Compounds (VOC)
- Semi-Volatile Organic Compounds (SVOC)

SI Finding:
Title 22 Metals:
Title 22 metal concentrations were compared to the Total Threshold Limit Concentration (TTLC), as well as to the 10-times Soluble Threshold Limit Concentration (STLC) value for each metal. No metals concentrations exceeded their TTLC(s). However, the 10-times respective STLC values were exceeded for metals in 66 soil samples; 64 contained chromium concentrations in excess of 50 mg/kg to a maximum of 100 mg/kg, and two contained lead in excess of 50 mg/kg to a maximum of 100 mg/kg. These samples were subsequently analyzed by the Waste Extraction Test (WET) method. These samples did not contain detectable soluble concentrations of the metals analyzed for, with the exception of 4.6 mg/l of lead in one sample. This concentration is less than the STLC of 5 mg/l for lead. Therefore, the soil analyzed for Title 22 metals is not considered hazardous with regard to disposal.

Hydrocarbons:
The Regional Water Quality Control Board (RWQCB) issued an Interim Site Assessment and Cleanup Guidebook, dated May 1996, as a guideline for petroleum hydrocarbon-impacted soil. Groundwater depths in the general vicinity are expected to be approximately 20 meter to 27 meter (~65 feet to ~90 feet) based on research conducted by Ninyo and Moore's detailed workplan. According to the guidance document, if the depth to groundwater is between 6-meter to 45 meter (~20 feet to ~150 feet), typical cleanup standards for TPHg and TPHd would be approximately 500 to 1000 mg/kg, respectively. The cleanup standard for TPHog and TPHo

would be 10,000 mg/kg. Based on these threshold limits, the hydrocarbon cleanup standards were not exceeded in the soil samples analyzed from the site.

BTEX Compounds (Benzene, Toluene, Ethyl benzene, and Xylene)
BTEX concentrations were compared to the cleanup levels provided in the RWQCB guidance document for soils 6 meter above groundwater. The next set of cleanup levels provided in the RWQCB guidance document is for soils 24.5 meter above groundwater. Since groundwater is expected to be approximately 21 meter (70 feet) below ground surface, the cleanup levels for soils 6 meter above groundwater were used. These levels are (depending on soil types) 11 to 44 ug/kg for benzene, 150 to 2,300 ug/kg for toluene, 700 to 9,000 ug/kg for ethyl benzene, and 1,750 to 24,500 ug/kg for xylene. These cleanup ranges were not exceeded in any soil sample with the exception of ***sample 561-115*** at 1.5 meter (5 feet), which contained a total xylene concentration of 4,200 ug/kg (exceeding the most conservative value). The sample was collected from the boring located in the sidewalk of 242nd Street adjacent to Parcel No. 7534-001-003 (the abandoned car wash) at a depth of 1.5 meter below grounds surface. The volume of impacted soil is expected to be low. As such, a practical and cost effective means of remediation in this area is excavation and disposal in conformance with the California Department of Toxic Substances Control Regulations.

Volatile Organic Compounds and Fuel Oxygenates (VOC):
The only VOC detected, other than the BTEX compounds, was 4-isopropyltoluene. The concentration of 4-isopropyltoluene was detected in ***sample 561-115*** at 1.5 meter (5 feet) at 61 ug/kg. The EPA currently does not regulate this compound, and the RWQCB guidance document does not address this compound.

Semi-Volatile Organic Compounds (SVOC):
The only SVOC compound detected was phenol, and it was identified in four of the samples analyzed at a concentration ranging from 400 uk/kg to 790 ug/kg respectively. These concentrations of phenol were compared to the published USEPA document, Preliminary Remediation Goals (PRG), for soil at industrial sites. The PRG is a risk-based estimate of the concentrations of chemicals in soil that serve as cleanup levels. The PRG for phenol is 530,000 mg/kg.

Lastly, based on the SI results, no further investigation is warranted at this time. However, as indicated in the investigation finding, the sample collected from ***boring 561-115*** at 1.5 meter (5 feet) contained a total xylene concentration which exceeded the most conservative cleanup levels provided in the RWQCB guidance document. The volume of impacted soil is expected to be low. As such, a practical and cost effective means of remediation in this area is excavation and disposal. However, the "hot spot" of Xylene that was discovered adjacent to Parcel 7534-001-003 (Abandoned carwash /Jack in the Box). This is one of the parcels that the Department was unable to access. In order to characterize and accurately appraise the said property for acquisition, a site investigation must be performed inside the property for a better assessment.

Specifications for the health and safety of the workers, as well as that of the public, shall be addressed when handling/disposing of the contaminated soil. Reuse of the contaminated soil in Caltrans right-of-way is subject to the stipulations imposed and regulated by the Department of

Toxic and Substance Control (DTSC). Litter and solid waste shall be handled and disposed of as outlined in the Avoidance and Minimization measures described later in this Section.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
c) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident/non-accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
d) Involve a substantial risk of an explosion or in any way affect overall public safety?	☐	☐	☐	☒

Answer to checklist items (#7 b,c,&d):

It is anticipated that the proposed project will not create a significant hazard to the public or the environment through the routine transport, use, disposal of hazardous material, or increase the risk of an explosion or the release of hazardous substances into the environment or adversely affect overall public safety. The Avoidance and Minimization Measures listed below will ensure this.

AVOIDANCE AND MINIMIZATION MEASURES (HAZARDOUS WASTE)

- All contaminated soils shall be treated (reused or disposed) in conformance with the California Department of Toxic Substances Control Regulations
- All contaminated soils shall be disposed of at a Class I Disposal Facility
- Specifications for the removal of asbestos and hazardous substances, if encountered during construction, shall be included in the project.
- Any suspected metals coated with lead-based paint, if encountered, shall be disposed of outside the highway's right-of-way
- Demolition activities shall be planned to avoid and prevent contamination of creosote material at the project site, if present. If encountered, creosote treated wood debris shall be taken to an approved certified disposal facility

8. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Violate or be inconsistent with Federal, State or local water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite?	☐	☐	☐	☒
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
e) Otherwise substantially degrade water quality?	☐	☐	☐	☒
f) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map ?	☐	☐	☐	☒
g) Modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	☐	☐	☐	☒
h) Encroach upon a floodplain or result in or be affected by floodwaters or tidal waves?	☐	☐	☐	☒
i) Adversely affect the quantity or quality of surface water, groundwater, or public water supply?	☐	☐	☐	☒
j) Result in the use of water in large amounts or in a wasteful manner?	☐	☐	☐	☒
k) Affect wild or scenic rivers or natural landmarks?	☐	☐	☐	☒
l) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☒
m) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒

n) Expose people or structures to inundation by Seishi, tsunami, or mudflow?	☐	☐	☐	☒

Answer to checklist items (#8a-n):

The proposed project will not modify a channel or waterbody of any type, or encroach upon a floodplain or adversely affect the quantity or quality of surface water, groundwater, or public water supply. The proposed project will not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or violate or be inconsistent with any Federal, State or local water quality standards or waste discharge requirements.

Short-term water quality impacts may result because of the proposed project. These temporary impacts would occur during construction periods only, and are not considered an adverse impact to water quality.

AVOIDANCE AND MINIMIZATION MEASURES (HYDROLOGY AND WATER QUALITY)

- A Water Pollution Control Plan shall be developed by the contractor, and approved by the Department, as well as Federal, State, and local resource agencies. This Plan will incorporate the resource agency approved methodology as well as all other appropriate techniques for reducing impacts to water quality.
- The Water Pollution Control Plan shall incorporate control measures in the following categories: Soil stabilization practices; sediment control practices; sediment tracking control practices; wind erosion control practices; and non-storm water management and waste management and disposal control practices
- If necessary, a re-vegetation plan shall be developed to restore and monitor the impacted area. Contour grading and landscaping with native plant species shall be utilized in stormwater retention and debris basin design.
- For both short and long-term water quality impacts, temporary as well as permanent Best Management Practices (BMPs) will be identified during final design when there is sufficient engineering details available to warrant competent analysis. The Department is committed to implementing cost-effective temporary and permanent BMPs as identified during final design.
- The contractor shall be required to comply with water pollution control provisions and Storm Water Pollution Prevention Plan (SWPPP) and conform to the requirements of the Caltrans Standard Specifications Section 7-1.01G "Water Pollution," of the Standard Specifications.
- If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted. If necessary, place sandbags, strawbales, silt fences, and other devices in accordance with the SWPPP shall be used.

9. NATURAL RESOURCES

Would the Project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the increased use of fuel or energy in large amounts or in a wasteful manner?	☐	☐	☐	☒
b) Result in an increase in the rate of use of any natural resource?	☐	☐	☐	☒
c) Result in the substantial depletion of any nonrenewable resource?	☐	☐	☐	☒
d) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
e) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
f) Result in the loss of availability of a known mineral resource or locally important mineral resource recovery site, that would be of value to the region and the residents of the state?	☐	☐	☐	☒

10. LAND USE AND PLANNING

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Answer to checklist item (#10a):

In addition to being consistent with the *General* and *Specific Plans for the City of Torrance*, the proposed project has the full support of the City. The Circulation Element in the *General Plan for the City of Torrance (General Plan)* provides for improving Hawthorne Boulevard from PCH to the south City limits and provides for improving PCH from Ocean Avenue to the east City limits. *The Specific Plan for the City of Torrance (Specific Plan)* states as an objective, the safe and efficient circulation of vehicular traffic in the corridor, including the objective to maintain and improve the existing peak traffic level of service. The *Specific Plan* also states that "Current

peak traffic volumes already exceed capacity in several areas" and also states as policy to "minimize potential conflicts between through traffic on Hawthorne Boulevard and turning traffic, between vehicles and pedestrians, and between traffic and stopped transit vehicles."

As well, it contains a policy to "maximize the efficiency of traffic operations through the implementation of transportation systems management improvements," and a policy to "provide for the movement and access of commercial vehicles and goods while maintaining the safety of pedestrians and other vehicles."

The proposed project will not conflict with any applicable land use plan, policy or regulation of an agency for the purpose of avoiding or mitigating an environmental effect. The project is consistent with the basic provisions of the Los Angeles County Congestion Management Program, however, in regard to making the most effective use all transportation modes, the project is unfortunately limited by right-of-way constraints.

The *Specific Plan* states that existing patterns of development are low density and auto-dependent, making multi-use, transit accessible, pedestrian friendly zones very difficult. The project will, however, maintain present designations for conventional highway, transit, bikeway, and pedestrian uses. Wheel chair accessible ramps will be maintained at each affected corner.

AVOIDANCE AND MINIMIZATION MEASURES (LAND USE POLICY)

- The streetscape shall be in compliance with the City of Torrance *Hawthorne Boulevard Specific Plan*, and to the satisfaction of the City's Planning Director

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Cause disruption of orderly planned development?	☐	☐	☐	☒
c) Support large commercial or residential development?	☐	☐	☐	☒

Answer to checklist items (#10 b&c):

The proposed project will not induce disruption of planned and orderly development. The *General Plan* states that "Torrance is a mature and built-out city and any significant physical expansion of the existing roadway system can be expected to come at substantial economic cost and social disruption." However, the proposed project is an intersection improvement project, and thus will not physically expand or extend any highways. Consequently, the aforementioned is not applicable.

The proposed project will not induce a substantial economic or social disruption. Also please see Checklist Item (#11a).

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Be inconsistent with a Coastal Zone Management Plan?	☐	☐	☐	☒

Answer to checklist item (#10d):

The proposed project area is outside the boundaries of the Coastal Zone Management Plan.

11. SOCIAL AND ECONOMIC

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Affect life-styles, or neighborhood character or stability, or physically divide an established community?	☐	☐	☐	☒

Answer to checklist item (#11a):

The proposed project is not anticipated to affect life-styles, neighborhood character or stability since will not remove or extend the existing facility, or remove any landmarks or unique topographic features. The proposed project will not promote the visual polluting of the area (also please see Checklist Item (#1)), or physically divide an established community, or force the relocation of any residential properties. The project will enhance the existing facility by promoting safer and more efficient traffic circulation with easier access to various communities in the vicinity of the proposed project.

Some traffic delays can be expected during construction of the project, however, these impacts will only temporary in nature and thus are not considered significant, nor will they disrupt or divide any communities. Funds have been allocated in order to provide a Traffic Management Plan (TMP) in order to alleviate this temporary traffic nuisance. Please see checklist item (#11f) for a discussion of the TMP. For a discussion of the project's impacts on housing and population in the area, please see checklist item (#12).

Pedestrian access at the intersection will be impacted temporarily during construction as well. Pedestrians will not be allowed in construction areas, and thus pedestrian traffic will be re-routed. The proposed pedestrian traffic detouring plan will be presented at the public hearing, as well as in the Final draft of this document.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Affect employment, industry or commerce, or require the displacement of businesses or farms?	☐	☐	☒	☐

Answer to checklist item (#11b):

Background Information

It is the policy of the California Department of Transportation, in accordance with the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Title 49 CFR Part 21, Executive Order 12898 regarding Environmental Justice in minority and low income populations, and related statutes and regulations that no person in the State of California, shall, on the grounds of race, color, sex, age, national origin, religion, or disabling condition, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity administered by or on behalf of the California State Department of Transportation. Also, please see Section 9 of this EA/IS.

Executive Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, required federal agencies to take the appropriate and necessary steps to identify and address "disproportionately high and adverse effects" of projects on the health or environment of minority and low-income populations to the greatest extent practical and permitted by law.

The CEQ 1997:19 defines "minority" as individuals who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander, Black, not of Hispanic origin; or Hispanic.

Utilizing poverty guidelines provided by the Department of Health and Human Services (http://aspe.hhs.gov/poverty/01poverty.htm), the poverty level is defined as per capita income of $8,860 for a one-person family unit, $11,940 per capita income for a two-person family unit, and $15,020 per capita for a three-person family unit, $18,100 per capita for a four-person family unit, $21,180 per capita for a five-person family, and $24,260 per capita for a six-person family. **SOURCE**: *Federal Register*, Vol. 67, No. 31, February 14, 2002, pp. 6931-6933.

Lastly, the Uniform Relocation Assistance and Real Property acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of the acquisition of real property for public use. Relocation impacts as a result of the proposed project are non-complex, and adequate relocation resources are available for displacees, and all will be treated in accordance with the aforementioned Acquisition and Relocation policies.

General Analysis

The proposed project will require the displacement of some immediately adjacent businesses due to the right of way acquisition needs of the action. This will potentially affect employment and commerce in the immediate area. Nearby residents who rely on the displaced businesses may be inconvenienced if they have to travel further away to obtain the same goods and services. However, the displacement impacts of this project are situated in a heavily commercial area, along a commercial corridor. There aren't any goods or services lost as a result of this action that cannot be obtained nearby. Thus, the impacts to local residents who rely on the displaced businesses are not considered to be significant.

The Department has coordinated its efforts with the City of Torrance, from the proposed project's design, to all environmental planning issues. The City of Torrance is in agreement with the Department's environmental planning decision making and is in full support of the proposed project. Furthermore, during the project scoping period (Section 5), the project was met with minimal public opposition.

The required right of way acquisitions include a mixture of fast food establishments, retail stores and offices. As seen in Table 13, Alternative-2 will require 12 full acquisitions and 6 partial acquisitions. Alternative 3 will require the 17 full acquisitions and 8 partial acquisitions. The full acquisitions will result in the displacement and relocation of the impacted businesses.

It is anticipated that the partial acquisitions will not result in the loss of parking to any of the affected businesses. The only exception is the "Best Buy" electronics superstore, which may lose fewer that ten (10) parking spaces. However, the Department anticipates that the proposed project will be successfully implemented without any reduction in parking to adjoining businesses, including "Best Buy". Thus, this impact is not anticipated to result in a significant economic loss to any businesses, or result in inadequate parking capacity. Also please see checklist items (#15f&g).

It is important to note that at this time, the project is a proposal, and that this document is only a Draft Environmental Document. Any actual right of way acquisition is contingent upon on approval of the final Project Report and final Environmental Document by the Department and the Federal Highway Administration (FHWA). At that point, the Department shall prepare Right of Way maps depicting the area involved and clearly delineating the proposed right of way. The Right of Way maps shall then be forwarded to the Caltrans District Director for approval before any action is taken.

If approved, all displacees will be contacted by a Caltrans Relocation Agent who will ensure that eligible displacees receive their full relocation benefits, including advisory assistance, and that all activities are conducted in accordance with the aforementioned Acquisition and Relocation policies.

At the time of the first written offer to purchase, owners occupants will be given a detailed explanation of Caltrans, "Relocation Program and Services". Tenant occupants of properties to be acquired will be contacted soon after the first written offer to purchase, and will also be given a detailed explanation of Caltrans, "Relocation Program and Services". Please see the

TABLE 13

PCH/Hawthorne Bl Intersection Improvement Project
R/W Acquisition Needs

				Alternative 1	Alternative 2	Alternative 3
APN	**Northeast Quadrant PCH/Hawthorne**	**Address**	**No. of Employeees**			
7378-010-036	Panda Express	3737 PCH, Torrance, CA	10	Not Affected	Partial Take	Partial Take
7378-010-036	Starbucks	3737 PCH, Torrance, CA	13	Not Affected	Partial Take	Partial Take
7378-010-039	Best Buy	3675 PCH, Torrance, CA	NA	Not Affected	Partial Take	Partial Take
7378-010-040	Best Buy	3675 PCH, Torrance, CA	NA	Not Affected	Partial Take	Partial Take
	Southeast Quadrant PCH/Hawthorne					
7534-001-900	Vacant Car Wash	3744 PCH, Torrance, CA	NA	Not Affected	Full Take	Full Take
7534-001-901	Vacant Restaurant	Not Available	NA	Not Affected	Full Take	Full Take
7534-001-003	Abandoned Car Wash	3720 PCH, Torrance, CA	NA	Not Affected	Full Take	Full Take
7534-001-003	Auto Repair	3720 PCH, Torrance, CA	3	Not Affected	Not Affected	Full Take
7534-001-003	Jack In The Box	24090 Hawthorne Bl, Torrance, CA	20	Not Affected	Full Take	Full Take
	Southwest Quadrant PCH/Hawthorne					
7534-002-008	Lazimi Lock Smith	3756 PCH, Torrance, CA	NA	Not Affected	Full Take	Full Take
7534-002-008	Five Star Window Tint	3758 PCH, Torrance, CA	2	Not Affected	Full Take	Full Take
7534-002-001	Westchester Carpets	3766 PCH, Torrance, CA	1	Not Affected	Full Take	Full Take
7534-002-001	Supreme Paint Store	3766 PCH, Torrance, CA	8	Not Affected	Full Take	Full Take
7534-002-001	2nd Time Around Thrift Shop	3776 PCH, Torrance, CA	7	Not Affected	Full Take	Full Take
7534-002-001	Ahimsa Yoga	3774 PCH, Torrance, CA	NA	Not Affected	Full Take	Full Take
7534-004-015	Walteria Park	3855 242nd Street	NA	Not Affected	Partial Take	Partial Take
	Northwest Quadrant PCH/Hawthorne					
7378-009-046	EZ Lube	24043 Hawthorne Bl, Torrance, CA	3	Not Affected	Not Affected	Partial Take
7378-009-047	Kentucky Fried Chicken	3777 PCH, Torrance, CA	3	Not Affected	Not Affected	Full Take
7378-009-048	International Grocery	3801 PCH, Torrance, CA	3	Not Affected	Not Affected	Full Take
7378-009-031	Pacific Designer Lumber Yard	3845 PCH, Torrance, CA	NA	Not Affected	Not Affected	Full Take
	Southside PCH b/w Ocean and Neece					
7534-003-001	Abandoned Restaurant	3800 PCH, Torrance, CA	0	Not Affected	Full Take	Full Take
7534-003-003	Pacific Coast Realty and Auction	3810 PCH, Torrance, CA	9	Not Affected	Full Take	Full Take
7534-004-004	Taco Bell	3830 PCH, Torrance, CA	5	Not Affected	Partial Take	Full Take
7534-004-011	Mc Donald's	3860 PCH, Torrance, CA	46	Not Affected	Not Affected	Partial Take
7534-004-012	Mc Donald's	3880 PCH, Torrance, CA	0	Not Affected	Not Affected	Partial Take
		Total Full Takes:		0	12	17
		Total Partial Takes:		0	6	8

TABLE 14 Ethnicity Breakdown of Impacted Establishment and Parcel Owners

Assessor's Parcel Number (APN):	Ethnicity of Parcel Owner	Establishment Located on Parcel	Ethnicity of Establishment Owner
APN# 7378-010-036	Asian	Panda Express	N/A- Corporate Owned
APN# 7378-010-036	Asian	Starbucks #5551	N/A- Corporate Owned
APN# 7378-010-039&-040	N/A- Corporate Owned	Best Buy CO., Inc #107	N/A- Corporate Owned
APN# 7534-001-900	N/A – City of Torrance	Vacant Car Wash	N/A – City of Torrance
APN# 7534-001-901	N/A – City of Torrance	Vacant Restaurant	N/A – City of Torrance
APN# 7534-001-003	Asian	Jack in the Box	N/A- Corporate Owned
APN# 7534-001-003	Asian	Abandoned Car Wash	Asian
APN# 7534-001-003	Asian	Abandoned Auto Repair	Asian
APN# 7534-002-008	Jewish	Lazimi Lock Smith Shop	Middle Eastern
APN# 7534-002-008	Jewish	Five Star Window Tint	Asian
APN# 7534-002-001	White	Westchester Carpets	White
APN# 7534-002-001	White	Supreme Paint Decorating	White
APN# 7534-002-001	White	2nd Time Around Thrift Shop	White
APN# 7534-002-001	White	Ahimsa Yoga	White
APN# 7534-004-015	N/A – City of Torrance	Walteria Park	N/A- City of Torrance
APN# 7378-009-046	White	EZ Lube	N/A- Corporate Owned
APN# 7378-009-047	Currently unknown	Kentucky Fried Chicken	N/A- Corporate Owned
APN# 7378-009-048	Currently unknown	International Grocery	Middle Eastern
APN# 7378-009-031	Currently unknown	Pacific Designer Lumber Yard	Currently unknown
APN# 7534-003-001	Asian	Old Restaurant/ Architect Office	Middle Eastern
APN# 7534-003-003	White	Pacific Coast Realty & Auction	White
APN# 7534-004-004	Middle Eastern	Taco Bell	N/A- Corporate Owned
APN# 7534-004-011&012	Currently unknown	McDonald's	N/A- Corporate Owned

Appendices section of this document for a full explanation of the Federal Highway Administration (FHWA) Uniform Relocation Act Benefits.

Environmental Justice Analysis (Business and Property Owners)
The proposed project is not anticipated to pose disproportionately high and adverse effects to minority business owners. As shown in Table 14 on the previous page, of the parcels to be impacted, three (3) of the parcels belong to Asian-Americans, one (1) belongs to a person of Jewish descent, one (1) belongs to a person of Middle-Eastern descent, three (3) belong to Caucasian-Americans, two (2) parcels belong to the City of Torrance, and two (2) are corporately owned. The Department is currently in the process of determining the ethnicity of the owners of the four (4) remaining parcels. However, it is clear that the proposed project is not adversely and disproportionately impacting any one minority.

Table 14 also shows the ethnicity of the impacted establishment owners. As can be seen, of the establishments to be impacted by the proposed project, eight (8) are corporately owned, five (5) are owned by Caucasian-Americans, three (3) are owned by Asian-Americans, three (3) are owned by Middle-Eastern Americans, and three (3) are owned by the City of Torrance. The remaining establishment is currently unknown. The Department is currently trying to determine the ethnicity of the owner. However, it is again clear that the proposed project will not adversely and disproportionately impact any one minority.

AVOIDANCE AND MINIMIZATION MEASURES (RIGHT OF WAY ACQUISITION)

- Please see the Appendices section of this document for a full explanation of the Federal Highway Administration (FHWA) Uniform Relocation Act Benefits.
- "Best Buy" shall be compensated monetarily for any loss of parking spaces. The exact amount of compensation shall be determined by the Caltrans Office of Right of Way at the time of right of way acquisition. The compensation shall be handled the same as an acquisition. The compensation amount will depend on how much parking is acquired. At the time of acquisition, the key question shall be, "Will the acquiring of parking make it impossible for the business to operate?" That will determine whether the business is being acquired "fully or partially". Then fair market value shall be applied to determine compensation.
- If there are setback requirements from the City of Torrance in which the business is located, then the building and business license departments of that city shall be consulted.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Affect property values or the local tax base?	☐	☐	☐	☒

Answer to checklist item (#11c):

There may be an initial loss of property and sales tax during relocation, however, this loss will be negligible relative to total tax revenue. As well, it is anticipated that tax loss will be temporary and that displaced businesses will resume payment of property and sales taxes upon relocation. Also, please see checklist item (#11b) for a discussion of the relocation assistance that will be offered to the displaced businesses as a result of the proposed project.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Affect any community facilities (including medical, educational, scientific, recreational, or religious institutions, ceremonial sites or sacred shrines)?	☐	☐	☒	☐

Answer to checklist item (#11d):

Any impacts to any community facilities, such as Walteria Park, will be as a result of construction related impacts such as increased traffic congestion at the intersection. However, these impacts will only be temporary in nature, and will be minimized by the Traffic Management Plan (TMP). Please see checklist item (#11f) for a discussion of the TMP.

During construction, the Department anticipates that Walteria Park-bound vehicular traffic may experience construction-related traffic congestion and delays at the intersection. Impacts to pedestrian access are not anticipated since there is currently no access to Walteria Park from either PCH or Hawthorne Boulevard. Walteria Park is accessible to pedestrians along the entire south side (242nd St.) and west side (Ocean Ave.).

Pedestrian access at the intersection itself will be impacted temporarily during construction however. Pedestrians will not be allowed in construction areas, and thus pedestrian traffic will be re-routed. The proposed pedestrian traffic detouring plan will be presented at the public hearing, as well as in the Final draft of this document.

A Section 4(f) Evaluation has been prepared to address the impacts to Watleria Park because of the proposed project. Section 4(f) of the Department of Transportation Act of 1966, codified in Federal law at 49 U.S.C. § 303, declares that "[i]t is policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

The parkland proposed for acquisition is located at the northernmost outer edge of the park, where it borders the south side of PCH. The proposed project will not impact any park facilities since the area proposed for acquisition is small, and since it will be limited to the northernmost outer edge of the park.

Alternative 2 requires that approximately 4.3 square meters (0.001 acres) be acquired from Walteria Park. Alternative 3 requires that approximately 36.2 square meters (0.009 acres) be

acquired. That's 0.02% and 0.2% of parkland proposed for acquisition, respectively. Thus, a significant impact to Walteria Park is not anticipated as a result of the proposed action. Please see the Appendices Section of this Section 4(f) Evaluation to view the design layout maps which clearly depict the acquisition impacts to Walteria Park.

AVOIDANCE AND MINIMIZATION MEASURES:

- The Traffic Management Plan (TMP) shall be prepared in conjunction with the City of Torrance. Please see Section 4, checklist item (#11f) for a discussion of the TMP.
- The Caltrans Division of Environmental planning shall consult the City of Torrance and the Caltrans Office of Landscape Architecture regarding the feasibility of adding uniform street trees along the proposed project segment at a reasonable interval (50 feet on center) since mature trees will be removed because of the proposed project. The Department shall propose that the trees be drought tolerant and a size to match the scale of the intersection. Native trees shall be considered. The Department shall also propose that the City of Torrance maintain the trees, as it does the existing trees.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Answer to checklist item (#11e):

Not applicable. The project setting is in a highly urbanized area in the City of Torrance. There are no wildlands within or immediately adjacent to the proposed project site. Furthermore, the proposed project will not create a new route to an otherwise isolated area. Therefore, exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires is not a possibility.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	☐	☐	☒	☐

Answer to checklist item (#11f):

There will be short-term (temporary) noise, dust, and access problems which will result from construction of the proposed project. Thus, these construction impacts are not considered permanent, and are therefore, below the level of significance as defined by CEQA.

Waste material removed from the construction area will be disposed of in accordance with the Standard Specifications listed in the California Administrative Code. Construction of the proposed project may result in suspended particulate matter being generated. Caltrans Standard Specifications pertaining to dust control and dust palliative requirements should effectively mitigate most dust problems during construction. Erosion control will require that no siltation from the construction site be allowed to enter the flood control channels or drainage system. Any impacts will be temporary, local, and limited to construction areas.

Noise during construction will be primarily due to the operation of heavy equipment. The operation of heavy equipment is largely regulated by local ordinances that typically restrict their operation to periods during the day when most people are active. Furthermore, the project contractor will be required to comply with all local noise level rules, regulations and ordinances as well as the State's Standard Specifications restricting noise levels. The impact of noise generated by construction equipment will be controlled by restricting operating times to periods of normal waking hours by standard specifications and local ordinances. Construction of this project may require use of equipment that has high noise characteristics. Typically, the equipment ranges from concrete mixers to jackhammers, which produce noise levels in the 80 dBA range to over 90 dBA at a distance of 50 feet. If possible, construction activities shall be confined to the daily period least disturbing to the business community.

Some traffic delays can be expected during construction of the project, however, the traffic impacts during construction are only temporary in nature. Funds have been allocated in order to provide a Traffic Management Plan (TMP). The TMP will be developed and incorporated as part of the project design prior to the onset of construction to minimize disruption to the existing traffic flow conditions. All potentially affected agencies, as well as the City of Torrance, shall be notified of the proposed project, and their input shall be incorporated into the TMP. The outreach components of the TMP will also serve as the Community Involvement Plan for the project.

The TMP will serve to notify the motoring public and affected parties of construction dates, activities, and alternate routes, in an effort to reduce the volume of traffic through the affected area. The TMP will also provide motorists with alternate routes around any congestion-related delays. Thus, the associated decrease in traffic volume will decrease the amount of congestion experienced. Any delays will be associated primarily to daytime traffic since traffic since nighttime traffic tends to be much lighter.

The TMP will be finalized during the Project, Specifications, and Estimates (PS&E) phase. Measures in the TMP will reduce traffic impacts during construction. The specifics of the TMP are outlined below.

Pedestrian access at the intersection itself will be impacted temporarily during construction as well. Pedestrians will not be allowed in construction areas, and thus pedestrian traffic will be re-

routed. The proposed pedestrian traffic detouring plan will be presented at the public hearing, as well as in the Final draft of this document.

AVOIDANCE AND MINIMIZATION MEASURES (CONSTRUCTION)

- Please see checklist items for additional details regarding temporary, construction related noise issues (#16d) , and checklist items (#3a&b) for additional details regarding temporary, construction related air quality issues
- The TMP will consist of the following elements to minimize construction related traffic disruption:

    1) Temporary traffic controls and signing shall be utilized
    2) The implementation of traffic control procedures will be in conformance with the Caltrans Traffic Manual.
    3) A minimum of two through travel lanes in each direction will be provided.
    4) Public information center
    5) Additional project signing
    6) Advertising in local and regional newspapers Staff attendance at local neighborhood and business association meetings to inform residents and merchants/landowners of project progress
- A pedestrian traffic detouring plan shall be developed and implemented in order to ensure the safety of pedestrians, as well as to minimize pedestrian traffic disruption

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
g) Does the project have environmental effects that are individually limited, but cumulatively considerable?	☐	☐	☒	☐

Answer to checklist item (#11g):

Current projects in the planning process, including any Caltrans, City of Torrance, or County of Los Angeles projects, will be subject to their own environmental review, and will be required to develop traffic mitigation measures to reduce their impacts.

The cumulative impacts of this proposed project are limited to the construction activities (e.g., noise, dust, temporary drainage, and temporary access limitations, etc.) for this roadway improvement. These impacts would be minimized if it were possible to avoid simultaneous construction of this proposed project and the other projects in the area described in Section 2.3 – Other Projects. However, that may not be possible since the scheduling is as follows.

The proposed project is anticipated to begin construction in Fall of 2004, and is anticipated to be completed in Fall of 2005. As mentioned in Section 2.3, the Caltrans safety improvement project

at various locations in the City of Torrance is anticipated to begin construction in Fall of 2002, and is anticipated to be completed by Summer of 2003. The City of Torrance Gap Closure project is anticipated to begin construction in Fall 2004, and is anticipated to be completed by Fall 2006.

As can be seen, the proposed project and the City of Torrance project will be under construction simultaneously. The City of Torrance indicated that its Gap Closure project will not impact traffic during construction since it will not require any construction related lane closures. However, if later deemed necessary, to avoid significant construction related cumulative impacts, the City of Torrance and this Department will coordinate and development a joint Traffic Management Plan to minimize traffic disruption in the area.

As mentioned in the discussion of checklist item (#11f), additional traffic delays can be expected during construction of this project. However, these construction-related traffic impacts will be only temporary in nature. A Traffic Management Plan (TMP) will be developed and incorporated as part of the project design prior to the onset of construction to minimize disruption to the existing traffic flow conditions. The outreach components of the TMP will also serve as the Community Involvement Plan for the project. Please see checklist item (#11f) for a discussion of the TMP.

AVOIDANCE AND MINIMIZATION MEASURES (CUMULATIVE IMPACTS)

- Also, please see checklist items (#3) for a discussion of cumulative air quality impact issues

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
h) Result in the use of any publicly owned land from a park, recreation area, or wildlife and waterfowl refuge?	☐	☐	☒	☐

Answer to checklist item (#11h):

The proposed project will require that some land be acquired from Walteria Park, a 4.5 acre park that is owned and maintained by the City of Torrance. However, the area to be acquired is miniscule and thus negligible in comparison to the total area of the park. Alternative 2 requires that approximately 4.3 square meters (0.001 acres) be acquired from Walteria Park. Alternative 3 requires that approximately 36.2 square meters (0.009 acres) be acquired. That's 0.02% and 0.2% of parkland proposed for acquisition, respectively. Thus a significant impact to this facility is not anticipated.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) Result in adverse affects to minorities, the elderly, the handicapped, transit dependent, or other specific interest groups.	☐	☐	☐	☒

Answer to checklist item (#11i):

Background Information
Please see the background information discussed in checklist item (#11b).

Environmental Justice Analysis (residents)
The proposed project will not result in the displacement of any residences. Thus, minority or low-income residents will not adversely or disproportionately affected by the proposed project. Also, please see checklist item (#12) for a discussion of housing and checklist item (#11b) for a discussion of the Environmental Justice Analysis (business and property owners).

As discussed in Section 3, the White, Black, Asian, American Indian, Hispanic, multi-racial, and other populations in the City of Torrance constitute 52.4%, 2.1%, 28.7%, 0.3%, 12.8%, 0.3%, and 3.5% of the total population, respectively (U.S. Census Data, 2000). As can be seen, Whites constitute the majority, and Asians constitute the largest minority in the City of Torrance.

The City of Torrance consists primarily of middle to middle-upper class households. The median household income in the City of Torrance is approximately $56,489, which is much higher than the medians for the City of Los Angeles ($36,687) and the County of Los Angeles ($42,189).

Elderly, handicapped, transit-dependent, or other specific interest groups will not be adversely affected by the project, except possibly during construction due to increased traffic congestion, noise, dust, etc. These impacts will only be temporary in nature, and thus not considered to be significant. Please see checklist item (#11f) for a discussion of temporary construction related impacts as a result of proposed project.

Pedestrian access at the intersection will be impacted temporarily during construction. Pedestrians will not be allowed in construction areas, and thus pedestrian traffic will be re-routed. The proposed pedestrian traffic detouring plan will be presented at the public hearing, as well as in the Final draft of this document.

Wheel chair accessible ramps will be maintained at each affected corner during and after construction of the proposed project. Furthermore, the Department's design is in conformance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG) which require a minimum clearance width of at least 3 feet for an accessible route.

Lastly, it is important to note that both the bus transit system and transit dependent individuals will benefit from the reduced congestion and travel time that will be achieved with the proposed improvements (please see Table 8). The intersection will also benefit from the proposed relocation of a bus stop that is currently located on the southwest corner of the PCH/Hawthorne Bl intersection. The Department is currently exploring the feasibility of relocating this bus stop to the southeast corner in an effort to reduce added delays that southbound PCH traffic desiring to turn right onto southbound Hawthorne Bl currently experience due to stopped buses.

During construction, the bus stops located in the immediate vicinity of the intersection will have to be temporarily relocated away from construction areas. The bus stops will be relocated to nearby areas, the exact locations to be specified in the pedestrian traffic detouring plan, which will be presented at the public hearing, as well as the Final draft of this document.

Conclusion:
The Department concluded that the proposed project will not result in significant adverse affects to minorities, the elderly, the handicapped, transit dependent, or other specific interest groups.

12. POPULATION AND HOUSING

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension or roads or other infrastructure)?	☐	☐	☐	☒

Answer to checklist item (#12a):

The proposed project will not directly or indirectly contribute to population growth since it is an intersection improvement project, not a development, or an extension of the highway or any other infrastructure. Highways are simply conduits that enable people to get from one point to another. Highways themselves do not create an increase in population or traffic. Traffic and population generators are residences, schools, businesses, shopping centers, manufacturing areas, recreation areas, and new industrial, commercial, or residential developments.

Furthermore, the proposed intersection improvement project is in conformance with the growth-related policies, goals and objectives of the City of Torrance General Plan. The proposed project will not attract or induce more residential development, cause a population increase in the community, or undermine or exceed the City of Torrance General Plan in terms of increasing the acreage of employment generating land uses, or increasing sewer or water supply needs in the area. The proposed project will not encourage the rezoning or reclassification of lands in the General Plan from agriculture or open space or low density residential to a more intensive land use. The proposed project will not lead to the intensification of development densities or

accelerate the schedule for development, nor will it facilitate actions by private interests to redevelop properties within two miles of the project. And although the project will lead to an increase of roadway and intersection, this increase is provided for in the General Plan.

As stated in the City of Torrance General Plan, Torrance is a mature and built-out city. Thus, there is little room for new development or growth in the area. In addition, the General Plan indicates that from 1970 to 1990 the population in the City of Torrance decreased by 1,477 people, despite an increase of over 9,600 housing units. The General Plan concludes "changes in the City's population will continue to be modest…"

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Affect existing housing, require the acquisition of residential improvements or the displacement of people or create a demand for additional housing?	☐	☐	☐	☒

Answer to checklist items (#12b&c):

There are no residential parcels immediately adjacent to Pacific Coast Highway or Hawthorne Boulevard within the proposed project area. Most residential parcels in the immediate vicinity of the proposed project area are buffered from PCH by commercial developments. Some residential parcels are partially buffered from PCH by commercial developments and a frontage road (242nd Street). Additionally, there are commercial developments on either side of these partially buffered residences.

The proposed project would not require the acquisition and displacement of residents of single family homes, apartments, or any other types of residential units. There are no residential relocations, and/or residential areas that would be significantly affected directly or indirectly by the proposed project. All proposed acquisitions are non-residential in a suburban community along a fully developed commercial corridor. Thus, the proposed project will not create a demand for additional housing.

13. PUBLIC SERVICES

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire and emergency protection and services?	☐	☐	☐	☒
Police protection and services?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Other public facilities or services?	☐	☐	☐	☒

Answer to checklist item (#13a):

The only foreseeable impact to governmental facilities, public services/utilities, fire protection agencies, law enforcement agencies, and emergency services will be temporary construction related traffic congestion. A Traffic Management Plan (TMP) shall be developed prior to construction in order to minimize these traffic impacts. The potentially affected agencies, as well as the City of Torrance and all applicable public safety personnel, shall be notified of the proposed project, and their input shall be incorporated into the TMP in order to avoid any unacceptable response time issues that would endanger the public. Please see Checklist Item (#11f) for a discussion of the TMP.

The proposed project does not include new residential, commercial, or industrial development or uses. Thus the proposed project would not increase the need for additional fire protection, law enforcement services, public utilities, or increases in student enrollment at nearby schools. Furthermore, the implementation of the proposed project is not expected to result in a significant impact on any public facilities. Please see checklist item (#11d).

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Answer to checklist items (#13b&c):

As discussed in checklist item (#12a), the proposed project will not induce a population increase in the area. The proposed project does not include new residential, commercial, or industrial development or uses. Thus, the proposed project would not increase the need for additional fire protection or law enforcement services, increases in student enrollment in the area, increase the demand or use of existing parks and other facilities in the area. Also, please see checklist item (#11g) and Section 5 of this document for a discussion of the proposed action's impacts to Walteria Park.

14. UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider that services or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
e) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒

Answer to checklist items (#14a-f):

The proposed project does not include the construction of any new developments that would generate wastewater, solid waste, or increase the demand for water supplies. The proposed

project will not significantly increase impervious surface areas that would generate higher amounts of storm water runoff. Please see checklist item (#7) for a discussion of hazardous materials and their disposal during project construction.

15. TRANSPORTATION/TRAFFIC

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity (V/C) ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

Answer to checklist items (#15a-c):

Through the proposed action, the Department intends to address the need for improvement of traffic flow and safety at the intersection. The proposed project will accomplish this by enhancing the capacity, level of service, and mobility through the intersection.

The proposed will not increase traffic to the proposed project area. Highways are simply conduits that enable people to get from one point to another. In fully urbanized areas like the City of Torrance, highways do not create an increase in population or traffic. Traffic and population generators are residences, schools, businesses, shopping centers, manufacturing areas, recreation areas, and new industrial, commercial, or residential developments.

Section 1 of this document discusses the existing and forecasted traffic conditions, with and without the proposed project. As discussed in that section, the proposed project will improve mobility through the intersection. The intersection is currently operating at a failing Level of Service (LOS), and this condition will only deteriorate further, and at a faster rate, resulting in increased and more severe traffic congestion if improvements are not made to the intersection.

Section 1 also discusses how accident rates at the intersection were higher than the Statewide average for similar intersections. The actual accident rate of both north and southbound PCH at the intersection, was 2.25 and 3.46 respectively, compared to the statewide average of 2.10 for

similar intersections. Analysis of collision diagrams and congestion related accidents indicate that sideswipe and rear-end collisions are the types of accidents that can be expected to increase as congestion levels increase. Thus, the congestion relief obtained through the proposed project improvements would aid in the reduction of congestion-related accidents, thus making the intersection safer.

Lastly, the proposed project will not introduce any hazardous design features or incompatible uses. The proposed action is merely an intersection improvement project, and it is anticipated that the proposed project shall actually improve safety at the intersection by reducing congestion related accidents. Please see Section 1 of this document for a discussion of existing and forecasted traffic conditions at the intersection, with and without the proposed project.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☐	☒	☐

Answer to checklist item (#15d):

As discussed in checklist item (#13a), the only foreseeable impact to governmental facilities, public services/utilities, fire protection agencies, law enforcement agencies, and emergency services will be temporary construction related traffic congestion. A Traffic Management Plan (TMP) shall be developed prior to construction in order to minimize these traffic impacts. The potentially affected agencies, as well as the City of Torrance and all applicable public safety personnel, shall be notified of the proposed project, and their input shall be incorporated into the TMP in order to avoid any unacceptable response time issues that would endanger the public. Please see Checklist Item (#11f) for a discussion of the TMP.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Result in alterations to waterborne, rail or air traffic? Result in a change in location that results in substantial safety risks?	☐	☐	☐	☒

Answer to checklist item (#15e):

Not applicable. There are no railroads at or near the proposed project area.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Affect or be affected by existing parking facilities or result in demand of new parking?	☐	☐	☐	☒

Answer to checklist item (#15f&g):

The proposed project may result in the loss of parking. The only impacted commercial establishment would be the "Best Buy" electronics superstore. The loss of parking spaces would be minimal since fewer than ten (10) parking spaces would be lost. However, the Department anticipates successful implementation of the project without any reduction in parking impacts, including to "Best Buy". Thus significant economic loss to Best Buy, or inadequate parking capacity to any of the adjacent businesses is not anticipated. Furthermore, the proposed project will not increase demand for parking, or reduce the parking of any other commercial or industrial establishments or residences in the area.

It is important to note that at this time, the project is a proposal. Any actual right of way acquisition is contingent on approval of the project. Also, please see checklist item (#11b).

AVOIDANCE AND MINIMIZATION MEASURES (LOSS OF PARKING):

- "Best Buy" shall be compensated monetarily for any lost parking. The exact amount of compensation shall be determined by the Caltrans Office of Right of Way at the time of right of way acquisition. The compensation shall be handled the same as an acquisition. The compensation amount will depend on how much parking is being acquired. At the time of acquisition, the key question shall be, "Will the acquiring of parking make it impossible for the business to operate?" That will determine whether the business is being acquired "fully or partially". Then fair market value shall be applied to determine compensation.
- If there are setback requirements from the City of Torrance in which the business is located, then the building and business license departments of that city shall be consulted.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
h) Have substantial impact on existing transportation systems or alter present patterns of circulation or movement of people and/or goods?	☐	☐	☐	☒

Answer to checklist item (15h):

The proposed project will improve traffic conditions. Temporary, construction related traffic congestion can be expected however. A Traffic Management Plan (TMP) shall be prepared to minimize these temporary traffic impacts. Please see checklist item (#11f) for a discussion of the TMP.

It is anticipated that the proposed project shall actually improve circulation of people and goods, not alter them. The proposed project will improve the Level of Service at the intersection, and will result in a commute time savings (decrease in the delay time to pass through the intersection). Please see Section 1 of this document for a discussion of existing and projected traffic conditions at the intersection, with and without the project.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
i) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Answer to checklist item (15i):

The *General and Specific Plans for the City of Torrance* did not mention any adopted policies, plans, or programs supporting alternative transportation at the intersection. As discussed in checklist item (#10a), the proposed project is consistent with the *General and Specific Plans*.

While alternative transportation policies, plans, and programs are desirable components of any roadway improvement project, right of way is often the limiting factor, and the primary reason why they are not incorporated into more roadway improvement projects. The proposed project unfortunately falls in the category. The intersection improvements alone, not including any dedicated bike lanes, bus turnouts, bicycle racks etc., require that at least twelve (12) businesses be displaced, and another six (6) businesses partially impacted. Please see checklist item (#11b) for a discussion of impacts to local businesses.

16. NOISE

Would the project:	Potentially significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Exposure of persons to excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

Answer to checklist items (16a):

Exposure of persons to groundborne vibration and noise is a possibility during construction. However, these impacts will only be temporary in nature, and thus not considered significant. Also, please see checklist item (#16d) and the Avoidance and Minimization measures outlined below.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of noise levels In excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Answer to checklist items (16b&c):

The proposed project shall be in compliance with all applicable local, State, and Federal noise ordinances. Furthermore, as mentioned previously, the proposed project is consistent with the *City of Torrance General and Specific Plans*.

The land use within the project limits is comprised of residences, a park, and commercial developments. Federal Highway Administration (FHWA) regulations (23CFR772) and the Traffic Noise Analysis Protocol (TNAP) state that noise abatement is only considered where noise impacts are predicted and only where frequent human use occurs, and where a lowered noise level would be of benefit. As a matter of practice, abatement is only considered for places where people are exposed to highway noise for at least 1 hour on a regular basis. Potential noise abatement measures include:

- Avoiding the project impact by using design alternatives, such as altering the horizontal and vertical alignment of the project
- Constructing noise barriers (soundwalls)
- Acquiring property to serve as a buffer zone
- Using traffic management measures to regulate types of vehicles and speeds
- Acoustically insulating public use or nonprofit institutional structures.

The existing noise levels range from 63 to 68 dBA-L_{eq}(h), and the future worst-hour noise levels after project completion (forecasted to the design year 2022 conditions) range from 65 to 70 dBA- L_{eq}(h). The predicted increase in traffic noise under design-year conditions relative to existing conditions is 2 dBA. This increase is attributed to the addition of the auxiliary lane and additional turn lanes and consequential increase in traffic volumes on PCH.

The traffic noise analysis indicated that only the residential area would be impacted after project completion [i.e. the noise level will approach or exceed FHWA Noise Abatement Criteria (NAC)]. NAC are given in Table 1. Since traffic noise impact has been identified, noise abatement has been considered for the impacted receiver.

The impacted residential area is located on southeast corner of PCH and Hawthorne Bl, immediately south of 242nd Street. It is partially buffered from PCH by commercial developments and a frontage road (242nd Street). The frontage road joins PCH at the end of the buffer zone. There are commercial developments on either side of the impacted residences. Thus considering the topography and location of the impacted residences, it has been determined that a soundwall cannot be constructed for this area due to the presence of the driveways, alleys, and local streets joining the highway. Due to these reasons, soundwalls have been deemed not feasible, and thus not recommended as part of the proposed project.

There are several commercial developments within the project limits. There are two commercial developments that have an outside eating area with frequent exterior human activity. The first is Starbucks Coffee Company located on the northeast corner of PCH and Hawthorne Bl. The future predicted noise level at Starbucks is 68 dBA-L_{eq}(h) which is below the 72 dBA-L_{eq}(h) under Activity Category C. The other is Taco Bell located on the eastbound Route 1 at 3830 Pacific Coast Highway. The future predicted noise level at Taco Bell is 70 dBA-L_{eq}(h) which is also below the criterion. Thus traffic noise abatement is unnecessary at these locations as well.

Walteria Park, which is owned and operated by the City of Torrance, is located within the project limits. It has an area of frequent human use along the PCH. The future predicted noise level at this park is 65 dBA-L_{eq}(h) which is below the required 67 dBA-L_{eq}(h) under Activity Category B. Thus traffic noise abatement is not necessary for the park. There are no hotels, motels, schools, or other establishments or facilities with frequent human outside use within the proposed project limits that would require any other traffic noise analysis or abatement.

Discussion of Analysis

Sound level reading, traffic counts and pertinent field data such as traffic flow speed and topography of the locations were used to develop the traffic noise model for the analysis. The traffic noise model was then used to predict future noise levels in order to identify traffic noise impacts. Future noise levels were considered for a design period of 20 years. The computer program SOUND2000, Caltrans' computer version of the FHWA's Traffic Noise Prediction Model (FHWA-RD-77-108), was used in this analysis to develop the traffic noise model for both existing and design-year conditions (Year 2022).

Future noise levels were predicted using traffic characteristics that would yield the worst hourly traffic noise impact on a regular basis. Percentages of cars, medium trucks, and heavy trucks were considered to remain the same in future as that of the present.

Table 3 and Layout L-2 show the location where predicted noise level approaches/exceeds the Noise Abatement Criteria of 67 dBA-L_{eq}(h) for Activity Category B. The Activity Category B land uses within the project limits under consideration included the residential properties and the

park. Please see Appendix 2 for a discussion of Fundamentals of Traffic Noise, Federal and State Noise Regulations, and Study Methodology.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Answer to checklist items (16d):

During the construction phases of the project, noise from construction activities will temporarily and intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, "Sound Control Requirements". These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications.

Table 15 summarizes typical noise levels produced by construction equipment commonly used on roadway construction projects. As indicated, equipment involved in construction is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 15 meters (50 feet). Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans standard specifications and would be short-term, intermittent, and dominated by local traffic noise. Implementing the following measures would minimize temporary construction noise impacts:

All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust.

As directed by the Engineer, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, or installing acoustic barriers around stationary construction noise sources.

TABLE 15

Equipment	Maximum Noise Level, 15 m (50 ft) distance
Scrapers	89 dBA
Bulldozers	85 dBA
Heavy trucks	88 dBA
Backhoes	80 dBA
Pneumatic tools	85 dBA
Concrete pump	82 dBA

Source: Federal Transit Administration, 1995

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Answer to checklist items (16e&f):

Although Torrance Municipal Airport is located in the vicinity of the proposed project area, the proposed project will in no way expose people residing or working near project area to excessive noise levels. The proposed project does not call to remove any structures or noise barriers which shield neighboring communities from airport, or any other type of noise.

17. MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒

Answer to checklist item (17a):

As analyzed and discussed in checklist items (#4), the proposed project area is situated in a highly urbanized area in the City of Torrance, outside the vicinity of any natural drainages, streams, or creeks. The proposed project area was deemed absent of any native vegetation, and absent of any as sensitive, threatened, endangered, and proposed plant and animal species habitat, aquatic or terrestrial. The proposed project will not adversely impact wetlands, wildlife corridors, species diversity, or impede any habitat conservation efforts.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Does the project have environmental effects that are individually limited, but cumulatively considerable? Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects probable future projects. It includes the effects of other projects that interact with this project and, together, are considerable.	☐	☐	☒	☐

Answer to checklist item (17b):

As analyzed discussed in checklist item (#3), any air quality cumulative impacts as a result of the proposed project will be limited to construction related activities only, and thus will be temporary and insignificant in nature. As mentioned previously, highways are simply conduits that enable vehicular traffic to move from one point to another. A highway itself does not generate traffic, thereby generating more emissions as would new development (i.e. new business or apartment building). Thus significant cumulative impacts are not anticipated.

As discussed in checklist item (#11g), current projects in the planning process, including any Caltrans, City of Torrance, or County of Los Angeles projects, will be subject to their own environmental review, and will be required to develop traffic mitigation measures to reduce their impacts.

The cumulative impacts of this proposed project will be limited to the construction activities (e.g., noise, dust, temporary drainage, and temporary access, etc.) for this roadway improvement. These impacts would be minimized if it were possible to avoid simultaneous construction of this proposed project and the other projects in the area described in Section 2.3 – Other Projects. However, that may not be possible since the scheduling is as follows.

The proposed project is anticipated to begin construction in Fall of 2004, and is anticipated to be completed in Fall of 2005. As mentioned in Section 2.3, the Caltrans safety improvement project at various locations in the City of Torrance is anticipated to begin construction in Fall of 2002, and is anticipated to be completed by Summer of 2003. The City of Torrance Gap Closure project is anticipated to begin construction in Fall 2004, and is anticipated to be completed by Fall 2006.

As can be seen, the proposed project and the City of Torrance project will be under construction simultaneously. To avoid significant construction related cumulative impacts, the City of Torrance and this Department will coordinate and development a joint Traffic Management Plan to minimize traffic disruption in the area. Please see checklist item (#11f) for a discussion of the TMP.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Answer to checklist item (17c):

As analyzed and discussed in checklist items (#1-16), the proposed project will not pose any significantly adverse effects on human beings either directly or indirectly.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one that occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)	☐	☐	☐	☒

Answer to checklist item (17d):

The proposed project does not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals. On the contrary, the proposed project will improve traffic movement in the general vicinity, thereby lowering the concentration of pollutants emitted by motor vehicles. And as mentioned previously, highways are simply conduits that enable vehicular traffic to move from one point to another. A highway itself does not generate traffic, thereby generating more emissions. Traffic generators are residences, schools, businesses, shopping centers, manufacturing areas, recreational areas, etc. Thus, the proposed project will not have an adverse effect on, or result in the long-term deterioration of, ambient air quality.

The proposed intersection improvement project is a small, localized project that is intended to improve the existing traffic conditions in and around the project area. It is not anticipated to have the potential to significantly impact the region at large. The proposed project does not call to build anything new, or to physically expand or extend any roadways. Thus the proposed project will not induce or invite growth or development in or around the proposed project area.

5-CONSULTATION AND COORDINATION

5. CONSULTATION AND COORDINATION

5.1 Scoping

5.1.1 What is Scoping?

Scoping is a process designed to examine a proposed project early in the Environmental Impact Statement / Environmental Impact Report (EIS/EIR) analysis and review process. Scoping is intended to identify the range of issues raised by the proposed project and to outline feasible alternatives or mitigation measures to avoid potentially significant environmental effects. The scoping process inherently stresses early consultation with local agencies, responsible agencies, review agencies, trustee agencies, tribal governments, and any federal agency whose approval or funding of the proposed project will be required for completion of the project.

Scoping is considered an effective way to bring together and resolve the concerns of other agencies and individuals who may potentially be affected by the proposed project, as well as other interested persons, such as the general public, who might not be in accord with the action on environmental grounds. Although similar in function, specific requirements may vary depending upon whether the environmental document to be produced is an EIS or EIR. If the document is intended to satisfy both requirements i.e., production of a joint EIS/EIR environmental document, the scoping process shall incorporate the requirements of both National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

5.1.2 Scoping Procedures for the Proposed Project

The environmental document for this project is an EA/IS, not an EIS/EIR. NEPA and CEQA regulations do not require an EA/IS to undergo formal scoping procedures. However, consistent with Caltrans's early involvement philosophy, and in light of the project's potential importance, scoping procedures were undertaken. Scoping was conducted from April 30, 2002 to May 30, 2002. Public Scoping Notification Ads were placed in the following newspapers on the following dates:

Los Angeles Times – South Bay Edition: April 28, 2002
Daily Breeze: April 30, 2002
La Opinion: April 30, 2002
The Philippine Times: May 3-9, 2002
The Peninsula News: May 2, 2002

Public Scoping Notification letters were mailed to every individual, official, business, and agency listed in Section 6.2. In addition to that, residents in a 2-mile radius of the proposed project area were mailed Scoping Notification flyers.

These Scoping Notification newspaper ads, letters, and flyers sought public comments, questions and concerns regarding the proposed project. The public was also encouraged to participate in the project process and invited to submit send written comments, questions, and concerns to:

Mr. Ronald J. Kosinski
Deputy District Director
Division of Environmental Planning
California Department of Transportation
120 South Spring Street, Rm 1-8A
Los Angeles, CA 90012

Please see the Appendices section of this document for a copy of the newspaper ad that was placed in the previously mentioned newspapers, as well as the Public Notification/Scoping letters and flyers mentioned previously. Also, please see the appendices section of the document for copies of the formal written comments received from the public during the scoping period. The Department's responses to those comments will be provided in the Appendices of the Final Draft of this Environmental Document.

5.2 Coordination

Coordination with the City of Torrance took place on December 11, 2001 and September 25, 2002. Coordination with the City of Torrance Parks and Recreation Department was conducted on September 23, 2002. The proposed project, including the small of acquisition of land from Walteria Park, were discussed. The proposed project has the full support of the City of Torrance.

5.3. Mailing List

5.3.1 Affected Parcel Owners Notified During Scoping

Owner of Parcel:	Business Located on Parcel
APN# 7378-010-036	Panda Express and Starbucks #5551
APN# 7378-010-039&-040	Best Buy CO., Inc #107
APN# 7534-001-900	Vacant Car Wash
APN# 7534-001-901	Vacant Restaurant
APN# 7534-001-003	Jack in the Box, Abandoned Car Wash & Auto Repair
APN# 7534-002-008	Lazimi Lock Smith Shop
APN# 7534-002-008	Five Star Window Tint
APN# 7534-002-001	Westchester Carpets
APN# 7534-002-001	Supreme Paint Decorating Centers
APN# 7534-002-001	2nd Time Around Thrift Shop
APN# 7534-002-001	Ahimsa Yoga
APN# 7534-004-015	Walteria Park
APN# 7378-009-046	EZ Lube
APN# 7378-009-047	Kentucky Fried Chicken

APN# 7378-009-048	International Grocery
APN# 7378-009-031	Pacific Designer Lumber Yard
APN# 7534-003-001	Abandoned Restaurant
APN# 7534-003-003	Pacific Coast Realty & Auction
APN# 7534-004-004	Taco Bell
APN# 7534-004-011&012	McDonald's

5.3.2 Affected Business Owners Notified During Scoping

Owner of:
Panda Express
Starbucks #5551
Best Buy CO., Inc #107
Vacant Car Wash
Vacant Restaurant
Jack in the Box
Abandoned Car Wash
Abandoned Auto Repair
Lazimi Lock Smith Shop
Five Star Window Tint
Westchester Carpets
Supreme Paint Decorating Centers
2nd Time Around Thrift Shop
Ahimsa Yoga
Walteria Park
EZ Lube
Kentucky Fried Chicken
International Grocery
Pacific Designer Lumber Yard
Abandoned Restaurant
Pacific Coast Realty & Auction
Taco Bell
McDonald's

5.3.3 Elected Officials Notified During Scoping

Office	Official
United States Member of Congress	The Honorable Jane Harman
California State Assemblymember	The Honorable Alan Lowenthal
California State Assemblymember	The Honorable George Nakano
California State Assemblymember	The Honorable Jenny Oropeza
California State Senator	The Honorable Betty Karnette

California State Senator	The Honorable Debra Bowen
Mayor, City of Hermosa Beach	The Honorable Kathy Dundabin
Mayor, City of Rancho Palos Verdes	The Honorable John McTaggart
Mayor, City of Redondo Beach	The Honorable Gregory Hill
Mayor, City of Rolling Hills	The Honorable Jody Murdock
Mayor, City of Rolling Hills Estates	The Honorable Susan Seamans
Mayor, City of Torrance	The Honorable Dee Hardison
Mayor, City of Palos Verdes Estates	The Honorable Rosemary Humphrey
Mayor Elect, City of Torrance	The Honorable Dan Walker
United States Senator	The Honorable Barbara Boxer
United States Senator	The Honorable Dianne Feinstein
Councilmember, City of Torrance	The Honorable Marcia Cribbs
Councilmember, City of Torrance	The Honorable Jack Messerlian
Councilmember, City of Torrance	The Honorable Dan Walker
Councilmember, City of Torrance	The Honorable Frank Scotto
Councilmember, City of Torrance	The Honorable Hope Witkowsky
Councilmember, City of Torrance	The Honorable Paul Nowatka
Councilmember Elect, City of Torrance	The Honorable Pat McIntyre
Councilmember Elect, City of Torrance	The Honorable Mike Mauno
Councilmember Elect, City of Torrance	The Honrable Ted W. Lieu
Supervisor, Los Angeles County	The Honorable Don Knabe
Mayor, City of Lomita	The Honorable Margaret Estrada

5.3.4 Local Agencies Notified During Scoping

Agency
Administrator, Torrance Unified School District
Torrance Chamber of Commerce President/CEO
Manager, City of Torrance
Chair, Cable TV Advisory Board, City of Torrance
Cable TV Administrator, City of Torrance
Env. Services Administrator, City of Torrance
Torrance Parks and Recreation Commission Liason
Planning Department Liason, City of Torrance
Transportation Division Head, City of Torrance
Finance Director, City of Torrance
Senior Div. Engr, Water Comm., City of Torrance
Director of Facilities Planning, El Camino College
President, Los Angeles Harbor College
Vice President of Admin. and Finance, Cal State DH
Administrator, City of Lomita
Business Mgr, Admin. Office, Torrance Muni Airport
Traffic Engr. Assoc., Torrance Planning Department
Director of Engineering, City of Torrance
Chief of Operations, Fire Dept., City of Torrance
Facilities Services Manager, City of Torrance

Director of Parks and Recreation, City of Torrance
Traffic Division Commander, City of Torrance
Director of Street Services, City of Torrance
Communications Division
Administrator, City of Lomita
Exec. Director, South Bay Cities Council of Gov'ts
Redondo Beach USD (get)
Clerk, City of Hermosa Beach
Treasurer, City of Hermosa Beach
Manager, City of Rancho Palos Verdes
Clerk, City of Rancho Palos Verdes
Director of Planning, City of Rancho Palos Verdes
Attorney, City of Redondo Beach
Clerk, City of Redondo Beach
Treasurer, City of Redondo Beach
Deputy City Clerk, City of Rolling Hills Estates
Manager and Clerk, City of Rolling Hills Estates
Assistant City Mgr., City of Rolling Hills Estates
Manager, City of Palos Verdes Estates
Deputy Clerk, City of Palos Verdes Estates
Attorney, City of Palos Verdes Estates
Director of Planning, City of Palos Verdes Estates
Manager, City of Rolling Hills
Principal Planner, City of Rolling Hills
Deputy Clerk, City of Rolling Hills
Acting Planning Div. Chief, LA Co. Dept of Pks & R
Deputy Superintendent, Redondo Beach USD
Manager, City of Hermosa Beach

5.3.5 Review, Trustee, and Responsible Agencies Notified During Scoping

Agency
Aeronautics Program Manager
Bureau of Engineering- City of Los Angeles
California Highway Patrol (West Los Angeles)
California Native Plant Society
California Wildlife Federation
Caltrans Headquarters
Center for Disease Control and Prevention
Centers for Disease Control
City of Los Angles
County of Los Angeles Dept. of Regional
County of Los Angeles Fire Department
Daily News
Department of Boating and Waterways
Department of Education

Department of Fish and Game
Department of Housing and Urban Development
Director of Public Works
Environmental Protection Agency (EPA)
Federal Aviation Administration
Federal Aviation Adminstration
Federal Emergency Management Agency
Federal Transit Administration, Region 9
LA City Department of Public Works
LA Dept of Water and Power
Los Angeles County Department of Public Works
Los Angeles County Sanitation District
Los Angeles County Sheriff's Department
Los Angeles Department of Transportation
Los Angeles Unified School District
Metropolitan Transportation Authority
Museum of Vertebrate Zoology
National Oceanic and Atmospheric Administration
Native American Heritage Commission
Native American Tribal Councils
Office of Transportation Programs
Planning Deputy (Federal)
Project Development and Management
Regional Air Pollution Control District
Regional Planner, Section Head
S. Department of Energy
Sierra Club
Southern California Association of Governments
Southern California Gas Company
State Clearinghouse
U.S. Army Corps of Engineers
U.S. Department of Agriculture
U.S. Department of Commerce, Room 6800
U.S. Department of Interior
U.S. Fish and Wildlife Service
USDA Natural Resources Conservation Service
USEPA, Region 9
Bureau of Street Services - City of Los Angeles
Bureau of Street Lighting - City of Los Angeles
Department of Water and Power - City of Los
Environmental Protection Agency (EPA)
Federal Highway Administration
Office of the Attorney General
Board of Public Works - City of Los Angeles
County of Los Angeles
City of Los Angeles Administrative Officer

5.4 Circulation of this Draft EA/IS

This draft EA/IS document will be circulated for Public Comment beginning on Friday October 18, 2002, and ending on Wednesday December 5, 2002. The public comment period shall last approximately 45 days. The public hearing for the draft EA/IS is scheduled for Wednesday, November 20, 2002 from 7pm-9:30pm at South Torrance High School, located at 4801 Pacific Coast Highway, Torrance, CA.

As with during the Scoping period, the Department will again seek public comments, questions and concerns regarding the proposed project. The public is encouraged to participate in the project process by attending the above mentioned public hearing, and by submitting written comments, questions, and concerns to Mr. Ronald J. Kosinski, Deputy District Director (address provided below).

The public notification procedures shall be the same as done for scoping. Ads shall be placed in the same newspapers, and notification letters and flyers shall be sent to the individuals, elected and city officials, and responsible, review, and trustee agencies listed in section 5.2.

Also, during the public comment period, copies of the EA/IS will be available for review at the Caltrans District 7 Office located at 120 South Spring Street, Los Angeles, CA 90012, as well as a local library/libraries if possible.

The public hearing mentioned above will serve the purpose allowing all interested and affected individuals and officials an opportunity to learn more about the proposed project, as well as to submit their formal questions and comments either in written or verbally. The Public Hearing will also allow all concerned an opportunity to discuss certain design features of the project with Caltrans staff before the final design is selected. The tentative schedule for construction will also was also discussed.

At the close of this draft EA/IS public comment period, formal comments will be accepted, recorded, and addressed in a final draft version of this EA/IS. Written, emailed, and faxed comments will be accepted as formal comments, as will the written and verbal comments made at the public hearing.

During the comment period for this draft EA/IS, all correspondence should be mailed to the attention of:

Mr. Ronald Kosinski, Deputy District Director
Division of Environmental Planning
California Department of Transportation, District 7
120 South Spring
Los Angeles, CA 90012

Public comment and participation is encouraged.

6-LIST OF PREPARERS

6. LIST OF PREPARERS

Caltrans District 7, Division of Environmental Planning
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Eduardo A. Aguilar, Environmental Planner
Michael Klima, Environmental Planner

Contributions were made by:

Caltrans District 7, Division of Environmental Planning
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Alex Kirkish, Associate Environmental Planner (Archaeology)
Claudia Harbert, Environmental Planner (Architectural History)
Paul Nguyen, Air Quality Scientist, URS Corporation
Leann Williams, Senior Transportation Planner (Air Quality Compliance)
David Ipps, Senior Transportation Planner (Headquarters Reviewer)
Stephanie Reeder, Associate Environmental Planner (District 7 Reviewer)

Caltrans District 7, Division of Project Development
Gregory Farr, Design Manager
Conrad Loera, Project Engineer

Caltrans District 7, Office of Right of Way
Lorna Foster, Right of Way Agent (Relocation Impact Study)

Caltrans District 7, Office of Environmental Engineering and Feasibility Studies
Steve Chan, Senior Transportation Engineer (Hazardous Waste)
Bahar Bakhtar, Transportation Engineer (Hazardous Waste)
Jin S. Lee, Senior Transportation Engineer (Noise Investigations)
Arnold Parmar, Transportation Engineer (Noise Investigations)

Caltrans District 7, Office of Landscape Architecture
Edward Boll, Senior Landscape Architect
Joseph Millman, Landscape Architect

Caltrans District 7, Engineering Services/Materials Laboratory
Gustavo Ortega, Senior Engineering Geologist

Caltrans District 7, Office of Traffic Investigation
Yunus Ghausi, Senior Transportation Engineer
Sin Kim, Transportation Engineer

Caltrans District 7, Office of Traffic Operations
Vin Kumar, Senior Transportation Engineer
Gillermo Gutierrez, Transporation Engineer

Caltrans District 7, Office of Engineering Services/Hydraulics
Ralph Sasaki, District Hydraulic Engineer – South

Caltrans District 7, Graphics
Rene Trujillo, Graphic Designer

7-TITLE VI POLICY STATEMENT

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5267
FAX (916) 654-6608

July 26, 2000

TITLE VI
POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, sex and national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

Jeff Morales

JEFF MORALES
Director

8-APPENDICES

APPENDIX 1 – Aerial Photograph

APPENDIX 2 – Project Limits Layout

INDEX OF SHEETS

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

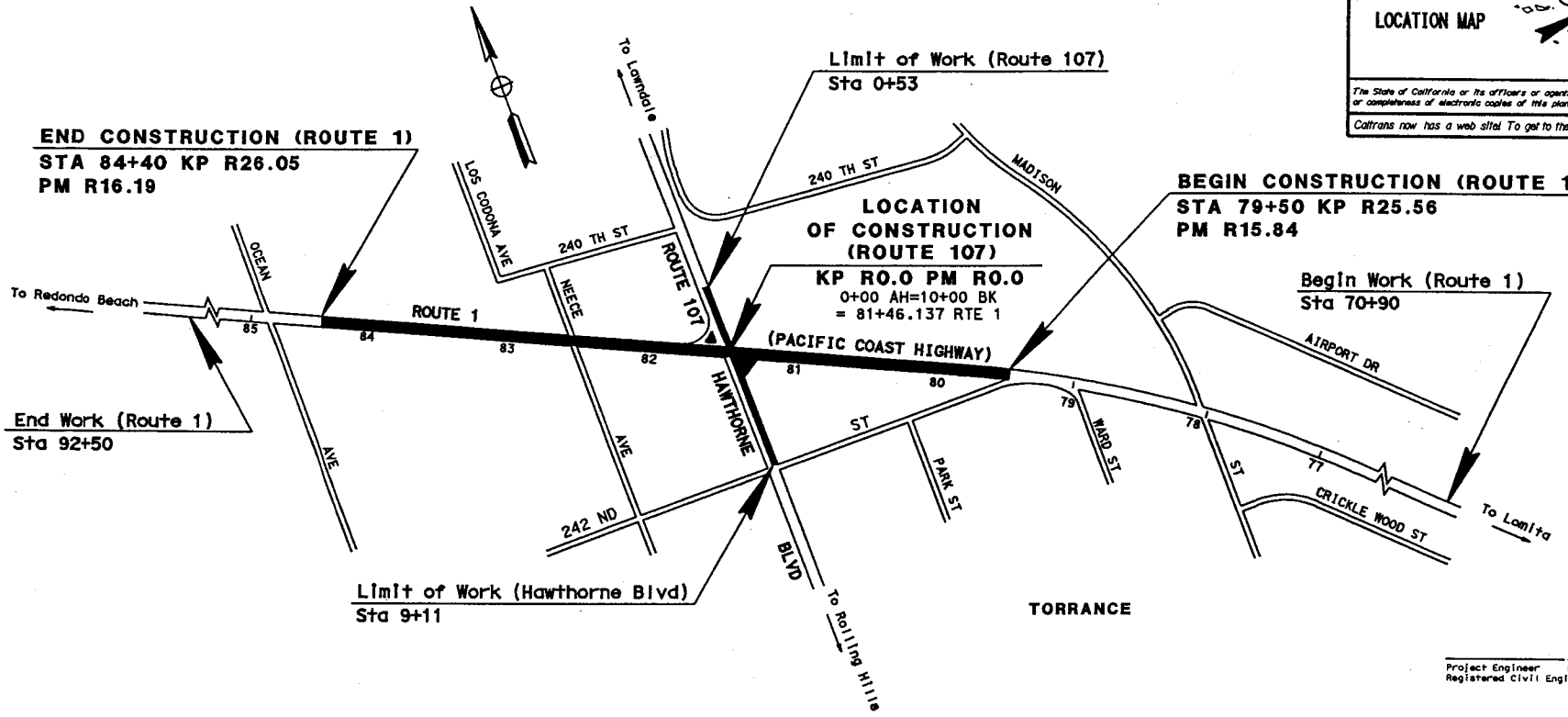
STATE HIGHWAY

IN LOS ANGELES COUNTY IN TORRANCE
ON ROUTE 1 FROM 0.15 km WEST OF MADISON STREET
TO 0.05 km EAST OF OCEAN AVENUE
AND ON ROUTE 107 AT ROUTE 1

To be supplemented by Standard Plans dated July, 1999

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO	TOTAL SHEETS
07	LA	1,107	R25.5/R26.0 R0.0		

Caltrans Metric



PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE	DESIGN OVERSIGHT
C. LOERA				

The Contractor shall possess the Class (or classes) of license as specified in the "Notice to Contractors".

NO SCALE

Project Engineer Date
Registered Civil Engineer

REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

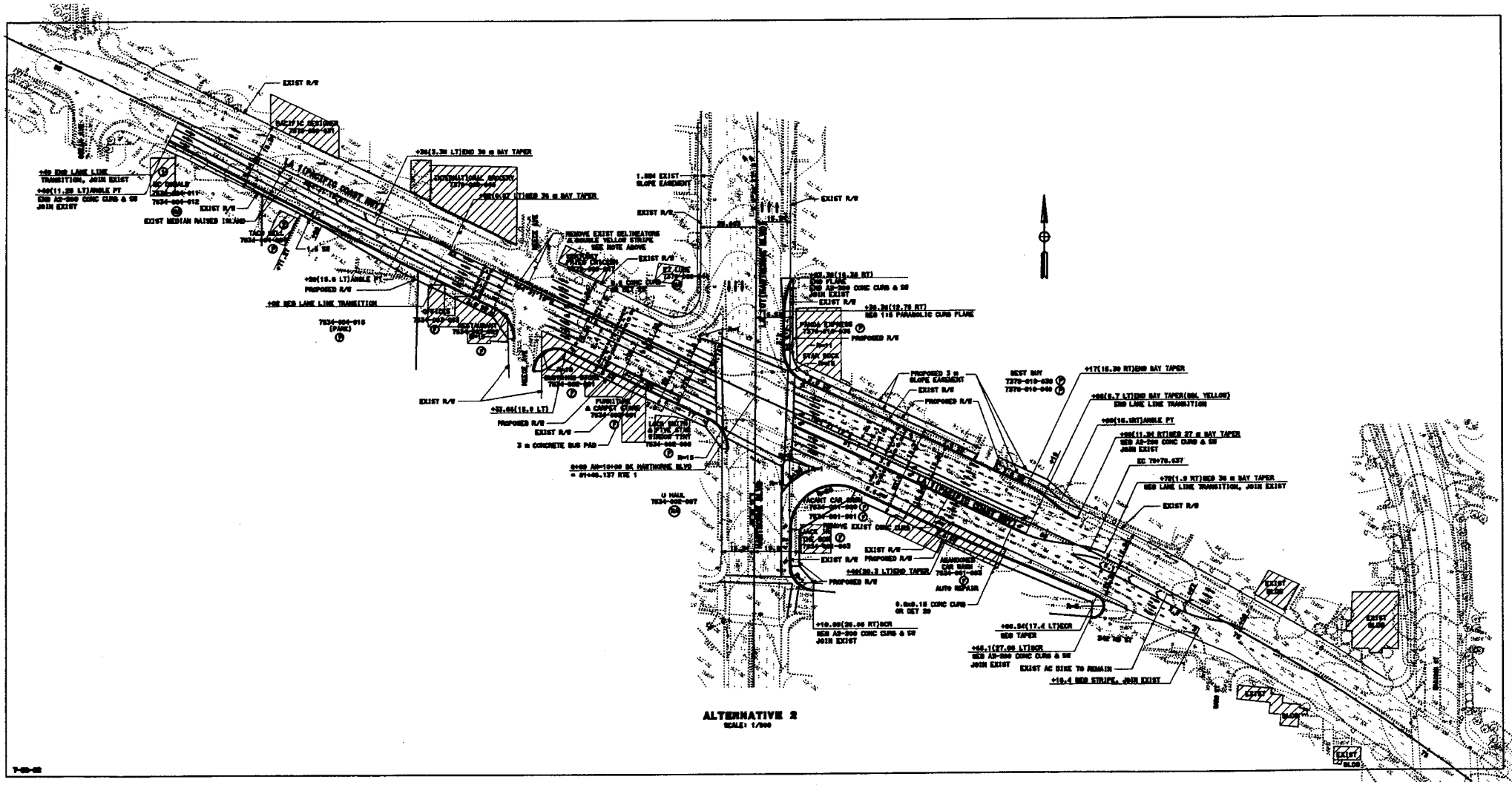
Plans Approval Date

Contract No. 07-217204

0 20 40 60 80

APPENDIX 3 – Alternative 2

- **Layout**

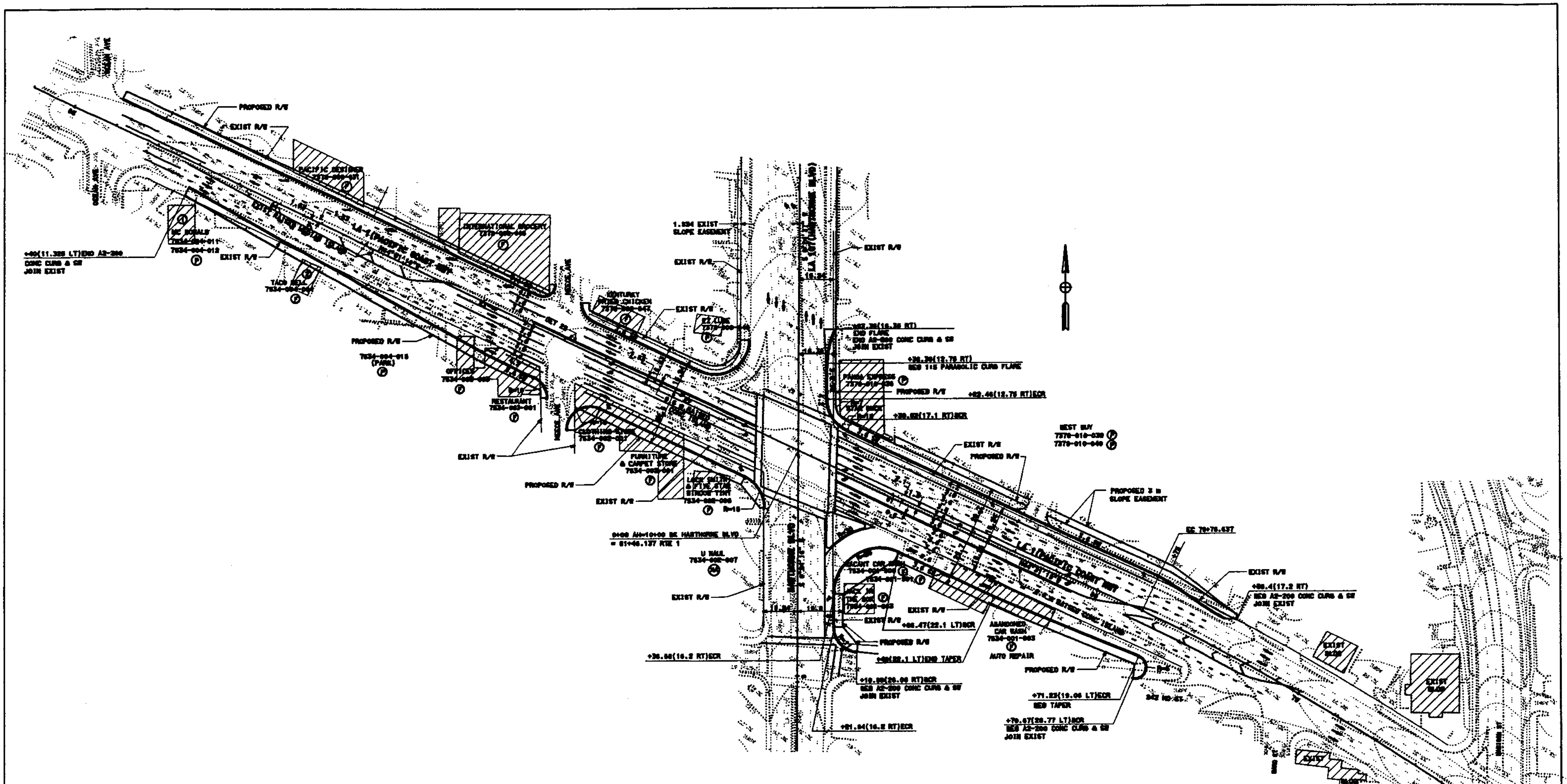


ALTERNATIVE 2

SCALE: 1/000

APPENDIX 4 – Alternative 3

- **Layout**



ALTERNATIVE 3

SCALE: 1/500

APPENDIX 5 – FHWA's Uniform Relocation Act Benefits

FHWA's Uniform Relocation Act Benefits

I. IMPORTANT RELOCATION ASSISTANCE INFORMATION

The following explanation is general in nature and is not intended to be a complete statement of Federal and State relocation laws and regulations. Any questions concerning relocation should be addressed to Caltrans Right of Way.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the first written offer to purchase, owner-occupants are given a detailed explanation of the State's relocation services. Tenant occupants of properties to be acquired are contacted soon after the first written offer to purchase, and also are given a detailed explanation of the Caltrans Relocation Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

II. RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, who has certified that they are a legal resident of the United States. Caltrans will assist displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase. (For business, farm, and nonprofit organization relocation services, see Section IV.)

Residential replacement dwellings will be in equal or better neighborhoods at rents or prices within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, and national origin, and which are consistent with the requirements of Title VIII of the Civil Rights Act of 1968, will be offered to displacees. This assistance will also include the supplying of information concerning Federal and State assisted housing programs, and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payment(s) and who are legally occupying a property required for the project will not be asked to move without first being given at least 90 days written notice, and not unless at least one decent, safe, and sanitary replacement residence, available on the market, is offered to them by Caltrans.

III. RESIDENTIAL RELOCATION PAYMENTS PROGRAM

The Relocation Payment Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of the replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Program can be summarized as follows:

Moving Costs: Any displaced person who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule.

Replacement Housing Payment - 180 day Owner Occupants: In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing. Homeowners who have owned and occupied their property for 180 days or more prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the loan rate for the mortgage on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations. The maximum combination of these three payments that the owner-occupant can receive is $22,500. If the total entitlement (without the moving payments) is in excess of $22,500, the Last Resort Housing Program will be used. (See the explanation of the Last Resort Housing Program below.)

Replacement Housing Payment - 90 day Occupants Tenants who have occupied the property to be acquired by Caltrans for 90 days or more and owner-occupants of 90-179 days prior to the date of the first written offer to purchase may qualify to receive a rental differential payment. This payment is made when Caltrans determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted below under the Down Payment section. The maximum amount payable to any tenant of 90 days or more and any owner-occupant of 90-179 days, in addition to moving expenses, is $5,250. If the total entitlement for rental supplement exceeds $5,250, the Last Resort Housing Program will be used. A 90-day occupant may choose to convert their Rent Differential to a Down Payment to aid in purchasing a replacement property. The down payment and incidental expenses cannot exceed the maximum payment of $5,250. The one year eligibility period in which to purchase and occupy a "decent, safe, and sanitary" replacement dwelling will apply.

In addition to the occupancy requirements, in order to receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe, and sanitary" replacement dwelling within one year from the date the department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Last Resort Housing: Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last resort housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation, as explained above. Last resort housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the $5,250 and $22,500 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances. In certain exceptional situations, Last Resort Housing may also be used for tenants of less than 90 days.

Other Relocation Information: After the first written offer to acquire the property has been made, Caltrans will, within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Preferences in area of relocation;
- Number of people to be displaced and the distribution of adults and children according to age and sex;
- Location of school and employment;
- Specific arrangements needed to accommodate any family members' special needs;
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.

IV. THE NONRESIDENTIAL RELOCATION ASSISTANCE PROGRAM

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms, and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are moving and searching expenses, and possibly reestablishment expenses or a fixed in-lieu payment instead of any moving, searching, and reestablishment expenses. Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment, and similar business-related property; dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $1,000 for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to $10,000 for reasonable expenses actually incurred.

In Lieu Payment

A fixed payment in lieu of moving and searching payments, and reestablishment payment, may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to the average annual net earnings for the last two taxable years prior tot he relocation and may not be less than $1,000, nor more than $20,000.

V. ADDITIONAL INFORMATION

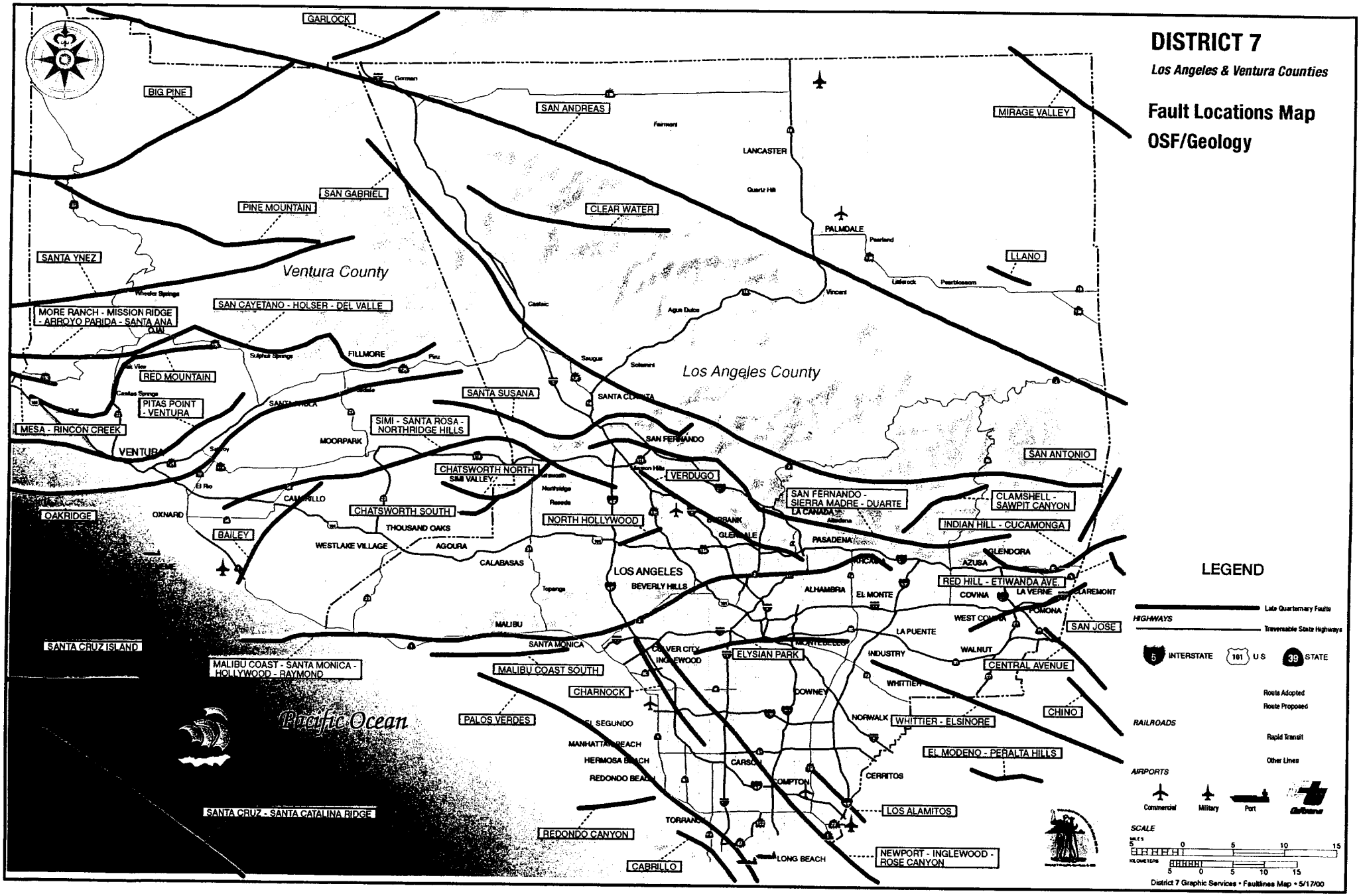
Relocation Payments

Reimbursement for moving costs and replacement housing payments are **not** considered income for the purpose of the Internal Revenue Code of 1954, or resources for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, local "Section 8" Housing programs, or other Federal assistance programs.

Right ot Appeal

Any person, business, farm or nonprofit organization which has been refused a relocation payment by the Caltrans relocation agent or believes that the payment offered by the agency are inadequate, may appeal for a special hearing of their complaint. No legal assistance is required. Information about the appeal procedure is available from your relocation agent.

APPENDIX 6 – Earthquake Fault Location Map


DISTRICT 7
Los Angeles & Ventura Counties
Fault Locations Map
OSF/Geology
GARLOCK
BIG PINE
SAN ANDREAS
MIRAGE VALLEY
LANCASTER
SAN GABRIEL
PINE MOUNTAIN
CLEAR WATER
PALMDALE
SANTA YNEZ
Ventura County
LLANO
SAN CAYETANO - HOLSER - DEL VALLE
MORE RANCH - MISSION RIDGE - ARROYO PARIDA - SANTA ANA
FILLMORE
RED MOUNTAIN
Los Angeles County
SANTA SUSANA
PITAS POINT - VENTURA
SIMI - SANTA ROSA - NORTHRIDGE HILLS
MESA - RINCON CREEK
MOORPARK
SAN FERNANDO
SAN ANTONIO
VENTURA
CHATSWORTH NORTH
VERDUGO
SAN FERNANDO - SIERRA MADRE - DUARTE
CLAMSHELL - SAWPIT CANYON
OAKRIDGE
OXNARD
CHATSWORTH SOUTH
NORTH HOLLYWOOD
INDIAN HILL - CUCAMONGA
BAILEY
THOUSAND OAKS
WESTLAKE VILLAGE
AGOURA
CALABASAS
LOS ANGELES
BEVERLY HILLS
RED HILL - ETIWANDA AVE.
SAN JOSE
MALIBU
SANTA CRUZ ISLAND
SANTA MONICA
ELYSIAN PARK
CENTRAL AVENUE
MALIBU COAST - SANTA MONICA - HOLLYWOOD - RAYMOND
MALIBU COAST SOUTH
CHARNOCK
CHINO
Pacific Ocean
PALOS VERDES
WHITTIER - ELSINORE
EL MODENO - PERALTA HILLS
SANTA CRUZ - SANTA CATALINA RIDGE
LOS ALAMITOS
REDONDO CANYON
NEWPORT - INGLEWOOD - ROSE CANYON
CABRILLO
LEGEND
Late Quarternary Faults
HIGHWAYS
Traversable State Highways
INTERSTATE
US
STATE
Route Adopted
Route Proposed
RAILROADS
Rapid Transit
Other Lines
AIRPORTS
Commercial
Military
Port
SCALE
MILES
KILOMETERS
District 7 Graphic Services • Faultlines Map • 5/17/00

APPENDIX 7 – Air Quality Regulations and Study Methodology

Regulatory Background

Federal Regulations/Standards

Pursuant to the federal Clean Air Act (CAA) of 1970, the U.S. Environmental Protection Agency (EPA) established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as

those pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations in order to protect public health. The NAAQS are two tiered: primary, to protect public health; and secondary, to prevent degradation of the environment (e.g., impairment of visibility, damage to vegetation and property, etc.).

The six criteria pollutants are O_3, CO, PM_{10}, NO_2, SO_2, and lead (Pb). The primary standards for these pollutants are shown in Table A7, and the health effects from exposure to the criteria pollutants are described at the end of this section. In July 1997, the EPA adopted a new NAAQS for particulates less than 2.5 microns ($PM_{2.5}$), as shown in Table A7. Data collected at permanent monitoring stations are used by the EPA to classify regions as "attainment" or "non-attainment" depending on whether the regions met the requirements stated in the primary NAAQS. Non-attainment areas are imposed with additional restrictions as required by the EPA.

The CAA Amendments (CAAA) designated the Basin as "extreme" non-attainment for O_3, requiring attainment with the federal O_3 standard by year 2010; "serious" for CO, required attainment of federal CO standards by year 2000; and "serious" for PM_{10} requiring attainment with federal standards by year 2006.

The CAAA requires states to achieve the NAAQS by developing a State Implementation Plan (SIP) that, when implemented, is designed to insure the achievement of the NAAQS. The SIP has to be approved by the EPA and serves as the State's commitment to actions that will reduce or eliminate air quality problems. An important aspect of the SIP is to designate a planning organization that will promulgate rules and implement strategies to achieve the NAAQS. The EPA has designated the Southern California Association of Governments (SCAG) as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA.

State Regulations/Standards

The state of California began to set California ambient air quality standards (CAAQS) in 1969 under the mandate of the Mulford-Carrell Act. The CAAQS are generally more stringent than the NAAQS. In addition to the six criteria pollutants covered by the NAAQS, there are CAAQS standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are listed in Table A7.

TABLE A-7

Pollutant	Averaging Time	California Standards [1]		Federal Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	0.12 ppm (235 µg/m³)	Same as Primary Standard	Ethylene Chemilumin-escence
	8 Hour	-		0.08 ppm (157 µg/m³)		
Respirable Particulate Matter (PM10)	Annual Geometric Mean	30 µg/m³	Size Selective Inlet Sampler ARB Method P (8/22/85)	-	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	24 Hour	50 µg/m³		150 µg/m³		
	Annual Arithmetic Mean	-		50 µg/m³		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		65 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean			15 µg/m³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m³)	Non-dispersive Infrared Photometry (NDIR)	9.0 ppm (10 mg/m³)	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m³)		35 ppm (40 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		-		
Nirtogen Dioxide (NO_2)	Annual Arithmetic Mean	-	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m³)	Same as Primary Standard	Gas Phase Chemilumin-escence
	1 Hour	0.25 ppm (470 µg/m³)		-		
Lead	30 days average	15 µg/m³	AIHL, Method 54 (12/74) Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m³	Same as Primary Standard	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	-	Fluorescence	0.030 ppm (80 µg/m³)	-	Pararosoaniline
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (365 µg/m³)	-	
	3 Hour	-		-	0.5 ppm (1300 µg/m³)	
	1 Hour	0.25 ppm (655 µg/m³)		-	-	
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 %. Method: ARB Method V (8/18/89).		No Federal Standards		
Sulfates	24 Hour	25 µg/m³	Turbidimetric Barium Sulfate – AIHL Method 61 (2/76)			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Cadmium Hydroxide STRactan			

See footnotes on next page.....

Source: California Air Resources Board (1/25/99)

Originally, there were no attainment deadlines for the CAAQS. However, the California Clean Air Act (CCAA) of 1988 provided a time frame and a planning structure to promote their attainment. The CCAA required non-attainment areas in the state to prepare attainment plans, and proposed to classify each area on the basis of the submitted plan as follows:

- Moderate - if CAAQS attainment could not occur before December 31, 1994;
- Serious, if CAAQS attainment could not occur before December 31, 1997; and
- Severe, if CAAQS attainment could not be conclusively demonstrated at all.

The attainment plans are required to achieve a minimum 5 percent annual reduction in the emissions of non-attainment pollutants unless all feasible measures have been implemented. The Basin is currently classified as a non-attainment area for three criteria pollutants. The Basin air quality status is listed as "extreme" for O_3, "serious" for CO, and "non-attainment" for PM_{10}. Concentrations of SO_2 and Pb are classified as "attainment." The Basin was recently redesignated for attainment of the federal NO_2 standard, since NO_2 levels have met the federal standard within the past few years. The Basin attainment status for $PM_{2.5}$ has not been determined.

The following paragraphs briefly describe the adverse health effects of the six criteria pollutants monitored in the Basin.

Ozone
O_3 (smog) is formed by photochemical reactions between NO_x and reactive organic gases, rather than being directly emitted. O_3 is a pungent, colorless gas typical of Southern California smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children. O_3 levels peak during the summer and early fall months.

Carbon Monoxide
CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the bloodstream, where it interferes with the transfer of oxygen to body tissues.

Nitrogen Oxides
NO_x contributes to other pollution problems, including a high concentration of fine particulate matter, poor visibility, and acid deposition. NO_2, a reddish-brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_x. NO_x is a primary component of the photochemical smog reaction. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide
SO_2 is a colorless, irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels in the Basin. SO_2

irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight.

Reactive Organic Compounds
Reactive Organic Compounds (ROC) are formed from combustion of fuels and evaporation of organic solvents. ROC is a prime component of the photochemical smog reaction. Consequently, ROC accumulates in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

Particulate Matter
Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (larger than 2.5 micrometers, or PM_{10}) come from a variety of sources, including windblown dust and grinding operations. Fine particles (less than 2.5 micrometers, or $PM_{2.5}$) often come from fuel combustion, power plants, and diesel buses and trucks. Fine particles can also be formed in the atmosphere through chemical reactions.

Coarse particles (PM_{10}) can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that fine particles ($PM_{2.5}$) at concentrations that extend well below those allowed by the current PM_{10} standards, which penetrate deeply into the lungs, are more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies. These health effects include premature death, increased hospital admissions, and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms.

Regional Air Quality Planning Framework

The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the state. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in non-attainment areas of the state.

The California Air Resources Board (CARB) coordinates and oversees both State and federal air pollution control programs in California. The CARB oversees activities of local air quality management agencies, and is responsible for incorporating Air Quality Management Plans (AQMPs) for local air basins into a State Implementation Plan (SIP) for federal EPA approval. The CARB maintains air quality monitoring stations throughout the state in conjunction with local air districts. Data collected at these stations are used by the CARB to classify air basins as "attainment" or "non-attainment" with respect to each pollutant and to monitor progress in attaining air quality standards.

The CARB has divided the State into 15 air basins. Significant authority for air quality control within them has been given to local Air Pollution Control Districts (APCD) or Air Quality Management Districts (AQMD), which regulate stationary source emissions and develop local attainment plans. The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution (e.g., the motor vehicles at an intersection, a mall, and highways). The CARB regulates motor vehicles and fuels.

Regional Air Quality Management Plan

The SCAQMD and SCAG are responsible for formulating and implementing the AQMP for the Basin. Regional AQMPs were adopted for the Basin for 1979, 1982, 1991, 1994, and 1997. The 1997 AQMP was prepared pursuant to federal and state clean air legislation, and addresses 1990 CAA requirements with respect to particulate matter standards. Under the CAA, the AQMP must demonstrate attainment of PM_{10} standards by 2006 for both 24-hour and annual average ambient air quality standards. The 1997 AQMP responds to this requirement, relying mostly on the control measures outlined in the 1994 AQMP.

Under the CCAA, air districts that will not attain state air quality standards by 2000 must prepare a comprehensive plan update by December 31, 1997. The 1997 AQMP serves as the comprehensive plan update for the South Coast Air Basin.

The 1997 AQMP carries forth the approach and key elements in the 1994 AQMP by focusing on market- based strategies and incentives versus command and control regulations. New elements to the 1997 Plan include:

1) Improved emission inventory and current air quality information;
2) Refined control strategy, which allows for alternative approaches;
3) Elimination of future indirect source measures;

4) Amendments to the federal post-1996 Rate of Progress Plan and Federal Attainment Plans for O_3 and CO;
5) A maintenance plan for NO_X; and
6) An attainment demonstration and SIP revision for PM_{10}.

Implementation of the AQMP is based on a series of control measures that vary by source type, such as stationary or mobile, as well as by the pollutant targeted. Similar to the 1994 AQMP, the AQMP proposes two tiers of control measures, based on the availability and readiness of technology. Short-term and immediate term measures rely on known technologies, and are expected to be implemented between 1997 and 2005. Long-term measures rely on the advancement of technologies and control methods that can be reasonably expected to occur between 2000 and 2010.

The SCAQMD governing Board approved the 1997 AQMP on November 15, 1996. After approval, the AQMP was submitted to the CARB for their review and approval. CARB approved the O_3 and PM_{10} portions of the 1997 AQMP on January 23, 1997, and submitted the plan to the EPA as proposed revisions to the SIP. The EPA recently rejected the District's revision of its 1994 AQMP. The rejection, however, covers only the provisions of the AQMP designed to attain the federal O_3 standard. Separate parts of the 1997 AQMP related to CO and NO_2 have been previously approved by the EPA, and they have not yet acted on the PM_{10} standards. The ozone portion of the 1997 AQMP was amended and adopted by the SCAQMD Governing Board on December 10, 1999. The amendments have been submitted to the EPA, but has not been approved. Therefore, the only plan approved by EPA for O_3 is the District's 1994 version.

Transportation Conformity

The CAA amendments of 1990 require that transportation plans, programs and projects which are funded by or approved under Title 23 and 49 of U.S.C. or Federal Transit Act (FTA) conform with state or federal air quality plans. Transportation conformity ensures that transportation agencies and air quality planning are integrated at the metropolitan and State levels such that the SIP and transportation plans and programs are consistent in identifying and implementing strategies to reduce emissions from mobile sources and meeting the NAAQS. Regional transportation plans (RTP) such as the transportation improvement program (TIP) are developed by counties and submitted to SCAG for approval. The TIP consists of policies, programs, and projects that if implemented would potentially reduce emissions for the project area. The TIP must be consistent with the conforming transportation plan, and the TIP must be found to conform to the SIP. Specifically, the transportation plan and TIP must result in emissions consistent with the emissions inventory proposed in the SIP. In order for a project to be found to conform, the project must come from a conforming transportation plan and TIP; the design concept and the scope of the project that was in place at the time of the conformity finding must be maintained through implementation; and the project design concept and scope must be sufficiently defined to determine emissions at the time of the conformity determination.

The Metropolitan Planning Organization (MPOs), SCAG, must have transportation plans in place that present a 20-year perspective on transportation investments for their region. SCAG is responsible for adopting regional growth forecasts and the Regional Transportation Improvement Plan (RTIP). The RTIP is a listing of all transportation projects proposed over a six-year period

for the SCAG region. The projects include programs such as highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, signal synchronization, intersection improvements, and freeway ramps. Once SCAG develops the RTIP, it is submitted to the Federal Highway Administration (FHWA) and the Federal Transit Administration for approval.

The proposed project is consistent with the SCAG's 1998 RTP which received U.S. Department of Transportation (DOT) approval June 8, 1998; and SCAG's 2001 RTP adopted May 5, 2001 and federally approved June 8, 2001. The proposed project is included in the federally-approved 2000/01–2005/06 RTIP prepared by the SCAG. The RTIP is in accordance with all applicable SIPS and is consistent with the 1998 RTP. The FY 2000/01-2005/06 RTIP conformity findings are based on five analyses: Consistency with the 1998 RTP; Regional Emissions Analysis; TCM Analysis; Fiscal Constraint Analysis; and Interagency Consultation and Public Involvement. Assumptions used in the FY 2000/01-2005/06 RTIP regarding population, employment, travel and congestion were the most recent developed by SCAG for the 1998 RTP, and included the most recent approved planning assumptions by SCAG's Regional Council. SCAG conducted a regional emissions analysis of the FY 2000/01-2005/06 RTIP using CARB emissions factors EMFAC7F.1 and EMFAC7G to estimate the regional emissions impact from implementation of the FY 2000/01-2005/06 RTIP. The 2001 RTIP conforms to all applicable SIPs for the Basin and is based on the latest assumptions; is consistent with the emissions factors used in the respective SIP; is consistent with the 2001 RTP; is financially constrained; and provides for the timely implementation of Transportation Control Measures (TCMs). This project have not been altered in design concept or scope from that described in the RTP and TIP, therefore, this project conforms to the requirements of the federal CAAAs of 1990 and can be implemented.

Methodology

The air quality assessment for the proposed project included estimating emissions associated with short-term construction and local CO and PM_{10} "hot spots" analyses. Emissions associated with short-term construction are quantified using EPA AP-42 emission factors, Caterpillar Performance Handbook, SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook, and data provided by Caltrans. Assumptions will be made for any data not available.

Carbon Monoxide Hotspot Analysis

The latest CALINE4 version is the CL4 model, which is used to assess air quality impacts from transportation activities. This air quality model estimate the CO concentration near intersections or roadway segments based on traffic volume, roadway geometry, topography, and meteorological data. CO concentrations at sensitive receptor locations are used to determine the significance of impact on air quality. Sensitive receptor locations are areas accessible to the general public such as sidewalk, retirement homes, hospitals, schools, and residential property lines. The receptor locations are placed at the sidewalk on the corners of the intersection to determine the significance of impact. All three alternatives were analyzed using the same general receptor locations for consistency and comparison purposes to assess the impact on local air quality. In certain alternatives the receptor locations were moved to the nearest feasible location because the expansion of the intersection would place the original receptor locations in the middle of a lane. The existing without project (using existing traffic data) is compared to the future with project (using future traffic data) to determine whether there will be an increase or decrease in CO concentrations.

The latest version of Caltrans emission factor model, CT-EMFAC 2.01, was used to provide the necessary composite emission factors for the CL4 model. CT-EMFAC 2.01 is based on CARB's EMFAC7F1.1 vehicle emission factor model used only in California and also used in the SIP and the RTIP to calculate regional emission inventory. The model was run using the vehicle fleet mix in the general vicinity to provide an accurate composite emission factor for the CL4 model. The vehicle fleet mix is derived from a Caltrans website and is an important variable in the calculation of emission factors because each category of vehicles emit a different amount of pollutant, such as the heavy-duty diesel trucks would emit much more pollutants than a regular passenger vehicle. The results from the air quality model, CL4, is an essential component in determining the level of significance and impact on regional and local air quality as a result of the proposed project.

The potential air quality impacts from CO emissions associated with the proposed project were assessed using guidelines developed by the California Department of Transportation (Transportation Project-Level Carbon Monoxide Protocol) and the CL4 CO hot spot analysis model.

PM_{10} Hotspot Analysis

FHWA currently requires a qualitative PM_{10} analysis for all non-exempt projects in PM_{10} non-attainment areas that are required to have a localized impact analysis. The proposed project is located in a PM_{10} non-attainment area, therefore, a qualitative analysis is required.

PM_{10} emissions associated with the construction activities to widen the existing intersection are calculated and compared to SCAQMD construction activities threshold to determine level of significance. A PM_{10} hotspot analysis is not required because the construction of the proposed project will be less than five years. However, calculation of PM_{10} emissions in this air quality analysis has been provided for reference purposes only because the roadway construction-related PM_{10} emissions from the proposed project have already been included in the regional emissions analysis for the 2001 RTIP. The 2001 RTIP was federally approved on June 8, 2001 therefore PM_{10} emissions associated with the proposed project is not expected to exceed the NAAQS or cause any PM_{10} violations or increase the frequency or severity of any existing PM_{10} violations in the area. To further reduce PM_{10} emissions, control measures have been recommended for site grading activities to further reduce fugitive dust emissions.

The potential air quality impacts from PM_{10} emissions associated with the proposed project were assessed using data developed by the SCAQMD (CEQA Air Quality Handbook).

Threshold of SignificanceThreshold for Construction Emissions
The following significance thresholds for construction emissions have been established by the SCAQMD:

- 2.5 tons per quarter or 75 pounds per day of ROC;
- 2.5 tons per quarter or 100 pounds per day of NO_X;
- 24.75 tons per quarter or 550 pounds per day of CO;
- 6.75 tons per quarter or 150 pounds per day of PM_{10}; and
- 6.75 tons per quarter or 150 pounds per day of SO_X.

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds above are considered significant by the SCAQMD.

Threshold for Operational Emissions
Specific criteria for determining whether the potential air quality impacts of a project are significant are set forth in the SCAQMD's CEQA Air Quality Handbook. The criteria include emissions thresholds, compliance with state and national air quality standards, and consistency with the current AQMP. However, the criteria pollutants of concern for this project are CO and PM_{10} therefore, the other pollutants will not be discussed in this air quality analysis.

CO Emission Standards
- California state one-hour CO standard of 20.0 ppm; and
- California state eight-hour CO standard of 9.0 ppm.
- Federal one-hour CO standard of 35.0 ppm; and
- Federal eight-hour CO standard of 9.0 ppm.

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If ambient levels are below the standards, a project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or

federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 ppm or more or eight-hour CO concentrations by 0.45 ppm or more.

APPENDIX 8 – Traffic Noise Investigation Supplemental

FUNDAMENTALS OF TRAFFIC NOISE

The following is a brief discussion of the fundamentals of traffic noise. For a detailed discussion, refer to the Caltrans Technical Noise Supplement or the FHWA Highway Noise Barrier Design Handbook. Electronic copies of these documents are available on the Caltrans website at http://www.dot.ca.gov/hq/env/noise/index.htm and on the FHWA website at http://www.fhwa.dot.gov/environment/noise/Manual.htm respectively.

Sound, Noise, and Acoustics

Sound is a vibratory disturbance created by a moving or vibrating source, in a gaseous or liquid medium or in the elastic strain of a solid which is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. The medium of main concern is air. In absence of any other qualifying statements, sound will be considered airborne sound, as opposed to, for example, structureborne or earthborne sound.

Noise is defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Sound (and noise) is actually a process that consists of three components: 1) the sound source, 2) the sound path, and 3) the sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there obviously is no sound. Likewise, without a medium to transmit sound pressure waves there is also no sound. And finally, sound must be received, i.e. a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most situations, there are many different sound sources, paths, and receivers, instead of just one of each.

Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. The field is very broad, and transportation related noise and its abatement covers just a small, specialized part of acoustics.

Traffic noise typically results from the interaction of the sources (moving vehicles) and the roadway. A considerable portion of traffic noise derives from the sound emitted by the combustion engines of these vehicles. From the source to the receiver noise varies both in level and frequency.

Frequency and Hertz

Sound can be described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch, like the low notes on a piano, whereas high-frequency sounds are high in pitch, like the high notes on a piano. Frequency is expressed in terms of oscillations, or cycles, per second. Cycles per second are commonly referred to as Hertz (Hz). A frequency of 250 cycles per second is referred to as 250 Hz. High frequencies are sometimes more conveniently expressed in units of kilo-Hertz (kHz), or thousands of Hertz. The extreme range of frequencies that can be heard by the healthiest human ears spans from 16–20 Hz on the low end to about 20,000 Hz (or 20 kHz) on the high end.

Sound Pressure Levels and Decibels

Sound pressure level (SPL) is the measurement of the air pressure fluctuations that a sound source produces. The decibel (dB) unit is used to express SPL. Decibels are logarithmic units of ratios of actual sound pressures to a reference pressure squared. The standardized reference pressure is 20 micro Pascals, which is the absolute threshold of hearing in healthy young adults and is equal to 0 dB.

Addition of Decibels

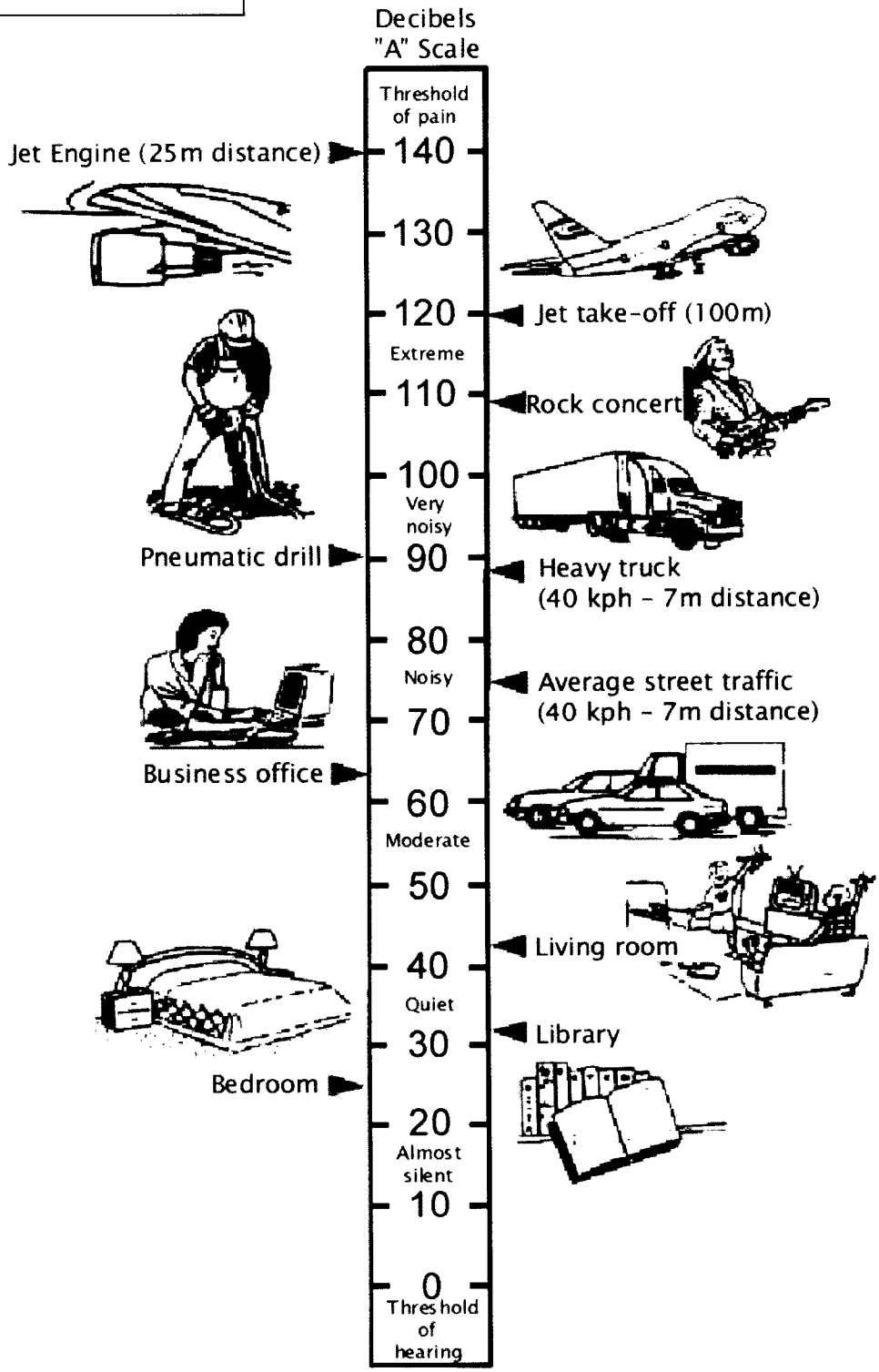
Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces an SPL of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dBA; they would, in fact, combine to produce 73 dBA. When two sounds of equal SPL are combined, they will produce a combined SPL 3 dBA greater than the original individual SPL. In other words, sound energy must be doubled to produce a 3-dBA increase. If two sound levels differ by 10 dBA or more, the combined SPL is equal to the higher SPL; in other words, the lower sound level does not increase the higher sound level.

Weighted Decibels

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited not only in the range of audible frequencies but also in the way it perceives the SPL in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound of higher or lower frequency with the same magnitude.

To approximate the frequency response of the human ear, a series of SPL adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency-dependent. The A-scale weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-scale, C-scale, D-scale), but these scales are rarely, if ever, used in conjunction with highway traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels (dBA). In environmental noise studies, A-weighted SPL's are commonly referred to as noise levels. Ranges of noise levels associated with common activities are shown in Figure A2.

FIGURE A-8



Source: Road Traffic Noise Task Force Final Report, Environmental Protection Agency

Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dBA when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dBA in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dBA. A change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as being twice or half as loud. As discussed above, a doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level. The relationship between noise level change, factor change in relative energy and perceived change is shown in Figure N-2211 of the Caltrans Technical Noise Supplement (TENS).

Noise Descriptors

A number of descriptors have been devised by acousticians to rate noise on the basis of such things as annoyance, loudness, short-term, long-term and by statistical levels.

Noise descriptors most commonly used in traffic noise analyses

Equivalent Sound Level (L_{eq})— The equivalent sound level represents an average of the sound energy occurring over a specified period. L_{eq} is, in effect, the steady-state sound level that, in a stated period, would contain the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour A-weighted equivalent sound level, $L_{eq}(h)$, is the energy average of the A-weighted sound levels occurring during a 1-hour period and is the basis for noise abatement criteria (NAC) used by Caltrans and the FHWA.

- *Percentile-Exceeded Sound Level (L_X)*— L_X represents the sound level exceeded for a given percentage of a specified period. For example, L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time.
- *Maximum Sound Level (L_{MAX})*— L_{MAX} is the highest instantaneous noise level measured during a specified time period. This descriptor is often referred to as "peak noise level".
- *Day-Night Level (L_{dn})*— L_{dn} is the 24-hour L_{eq} with a penalty of 10 dBA added to noise levels measured between 10:00 p.m. and 7:00 a.m.
- *Community Noise Equivalent Level (CNEL)*— is the 24-hour L_{eq} with a penalty of 10 dBA added to noise levels measured between 10:00 p.m. and 7:00 a.m. and 5 dBA added to sound levels occurring between 7:00 p.m. and 10:00 p.m.

Noise Propagation

From the source to the receiver, noise changes both in level and frequency. Noise decreases as the distance from the source increases. The rate of decrease depends on the following important factors:

- Geometric spreading from point and line sources
- Ground absorption
- Atmospheric effects and refraction
- Shielding by natural and manmade features, noise barriers, diffraction, and reflection

Sound levels attenuate at a rate of 6 dBA for each doubling of the distance from a stationary point source. This occurs because the energy of sound per unit area decreases due to the geometric spreading of its spherical pattern. Highway traffic noise, however is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line rather than a point when viewed over some time interval. The geometric spreading is that of a cylindrical pattern. Since the change in surface area of a cylinder only increases by two times for each doubling of the distance from the source instead of the four times associated with spheres, the change in sound level is 3 dBA per doubling of distance.

The characteristics of the surface between the source and the receiver dictate whether ground absorption or noise reflection will occur. Grounds with a reflective surface are considered hard sites. Parking lots and smooth bodies of water are typical examples. No excess ground attenuation is assumed for such sites. The change in noise level as distance increases (drop-off rate) is simply the geometric spreading of the line source or 3 dBA per doubling of distance. Soft sites have an absorptive ground surface. Soft dirt, grass or scattered bushes and trees fall into this category. An excess ground attenuation value of 1.5 dBA per doubling of distance is then assumed. The result is an overall drop-off rate of 4.5 dBA per doubling of distance.

Atmospheric conditions can affect the propagation of traffic noise within 60 meters from a highway. Wind, air temperature and humidity are the factors that have the most significant effects. A 10 kilometers per hour cross wind can increase noise levels at 75 meters by about 3 dBA downwind, and reduce noise by about the same amount upwind. Temperature variations with respect to elevation from ground level can also affect noise propagation. Decreasing temperatures, as height increases, may result in lower noise levels. The converse occurs when temperatures increase, noise may increase as well.

Large objects between the source and the receiver can significantly attenuate noise levels. The amount of attenuation depends on the size of the obstruction. A continuous and very dense strip of trees and vegetation may provide up to 5 dBA reduction if it is at least 5 meters high above the line of sight and 30 meters in depth. The reduction limit is 10 dBA as sound passes over the treetops and gets refracted back to the surface by the previously discussed atmospheric conditions.

First row buildings generally provide 3 dBA noise level reduction when they occupy 40% to 65% of the row. 5 dBA is allowed when the buildings occupy 85% to 90% of the row. 1.5 dBA reduction may be considered for each additional row. As in the case of vegetation, the attenuation limit is 10 dBA. Man-made noise barriers are either walls or berms and can generally reduce noise by up to 15 dBA.

FEDERAL AND STATE POLICIES AND PROCEDURES

Affected Projects

Transportation projects affected by the Traffic Noise Analysis Protocol (TNAP) are Type I projects. A Type I project is defined in Title 23, Part 772 of the Code of Federal Regulations (23CFR772) as follows. A proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes. Caltrans extends this definition to State-funded highway projects and adds the FHWA interpretation of the above definition.

National Environmental Policy Act (NEPA)

Under NEPA, impacts and measures to mitigate adverse impacts must be identified, including the identification of impacts for which no or only partial mitigation is possible. The FHWA regulations constitute the Federal Noise Standard. Projects complying with this Standard are also in compliance with the requirements stemming from NEPA.

Federal Highway Administration (FHWA) Regulations

Under FHWA regulations (23 CFR 772), noise abatement must be considered for Type I projects when the project results in a substantial noise increase, or when the predicted noise levels approach or exceed the Noise Abatement Criteria (NAC). The NAC for various activity categories is given in Table A8. Noise abatement measures which are feasible and reasonable and that are likely to be incorporated in the project, as well as noise impacts for which no apparent solution is available, must be identified and incorporated into the Environmental Document.

California Environmental Quality Act (CEQA)

Under CEQA, a substantial noise increase may result in a significant adverse environmental effect and, if so, must be mitigated or identified as a noise impact for which it is likely that no, or only partial abatement measures are available. Specific economic, social, environmental, legal, and technological conditions may make additional noise attenuation measures infeasible.

Street and Highways Code, Section 216

If, as a result of a proposed freeway project, noise levels in classrooms of public or private elementary or secondary schools exceed 52 dBA, $L_{eq}(h)$ the Department shall provide noise abatement to reduce classroom noise to the criteria or below. If the classroom noise exceeds the criteria before and after the freeway project, the Department shall provide noise abatement to reduce classroom noise to pre-project noise levels. Section 216 of the Streets and Highways Code are provides guidelines for school classroom traffic noise impact and abatement.

TABLE A-8

Activity Categories and Noise Abatement Criteria (NAC) per FHWA

Activity Category	NAC dBA $L_{eq(h)}$	Description of Activities
A	57 – Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 – Exterior	Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 – Exterior	Developed lands, properties or activities not included in Categories A or B above.
D	–	Undeveloped lands.
E	52 – Interior	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Traffic Noise Analysis Protocol

The Traffic Noise Analysis Protocol (TNAP) applies to all new highway construction and reconstruction projects. It specifies the policies, procedures, and practices to be used by agencies that sponsor such projects. The highway noise analysis and abatement/mitigation, requirements specified in TNAP are the same as those specified in CEQA, NEPA, 23CFR772, and Section 216 of the Streets and Highways Code.

According to TNAP, a noise increase is substantial when the predicted noise levels with the project exceed existing noise level by 12 dBA. A traffic noise impact will occur when predicted noise levels with the project approach within 1 dBA, or exceed the NAC.

STUDY METHODS AND PROCEDURES

Selection of Receivers and Measurement Sites

Noise sensitive receivers in the project area that are subject to traffic noise impacts from highway-generated noise were identified. Noise sensitive areas typically include residences, schools, libraries, churches and temples, hospitals, recreation and sport areas, playgrounds, hotels, motels and parks.

For this project, Caltrans Noise and Vibration Investigations Branch personnel performed a field survey of the entire area within the limits of the project. The survey included visiting the project site in order to identify land uses within the project limits and to select the noise measurement sites. The entire area within the project limits could be acoustically represented by 4 noise measurement sites.

The noise measurement sites were selected taking into consideration the following general site requirements:

- The sites were acoustically representative of area and conditions of interest. They were located at areas of frequent human use.
- The sites were clear of major obstructions between source and receiver. Microphone positions were more than 3 meters away from reflecting surfaces.
- The sites were free of noise contamination by sources other than those of interest. The sites were not located near barking dogs, lawn mowers, pool pumps, air conditioners, etc.
- The sites were not exposed to prevailing meteorological conditions that were beyond the constraints discussed in the TENS.

Measurement of Existing Noise Levels

The existing noise environment in the project area was determined by performing four short-term (15-minute) noise readings. The existing noisiest hour was not determined for this project. Additionally, a background noise level was also taken in the community. This was measured to be 55 dBA-L_{eq}(h). Background noise level is the total of all noise generated within the community and is measured away from the freeway where freeway traffic noise does not contribute to the total noise level. Background noise levels are typically measured to determine the acoustical feasibility (noise reducibility of 5 dBA) of noise abatement and to insure that noise reduction goals can be achieved. Noise abatement cannot reduce noise levels below background noise levels.

Short-term noise readings were taken on 3/20/2002 between 10:20 a.m. and 12:55 p.m., using Metrosonics Models MS3080 sound level meter (serial number 3194) placed 1.5 meters (5 feet) above the ground on a tripod. Measurements were taken for periods of 15 minutes at each location. The short-term monitoring locations are shown on Figure 3 and Layouts L-1 and L-2. During the short-term measurements, Caltrans staff attended the sound-level meter. The readings were recorded when no significant sound level contamination from sources other than the freeway traffic were present. The noise levels measured during the measurement period were

logged in the sound level meter's memory and later downloaded to a personal computer and printed.

The calibration of the meter was checked before and after the field measurement using the Metrosonics CL 304-7459 calibrator. Wind speed was measured during the short-term noise monitoring sessions by using Kestrel anemometer and found to be in the range of 1.4 – 8.2 km/h (0.9 – 5.1 mph). No noise reading was recorded when the wind speed exceeded a sustained 16 km/h (10 mph). Traffic on Pacific Coast Highway was counted simultaneously when noise measurement was being recorded from each site. Traffic counts and vehicle classifications were manually performed by Caltrans staff. Vehicles were classified as automobiles, medium-duty trucks, and heavy-duty trucks. An automobile is defined as a vehicle with two axles and four tires and primarily designed to carry passengers. Small vans and light trucks are in this category as well. Medium trucks include all cargo vehicles with two axles and six tires. Heavy trucks include all vehicles with three or more axles.

Traffic speeds on Route 1 (PCH) were determined by traveling in the flow of traffic while observing the vehicle speed on the speedometer. The posted speed limit on PCH in the project area is 72 km/h (45 mph).

Noise Prediction Model

LEQV2, SOUND32 and SOUND2000 are Caltrans' versions of the FHWA model for calculating traffic noise levels. For the traffic noise analysis presented in this report, SOUND2000 traffic noise prediction computer program was used. In order to develop the analytical model, all relevant topographic features, including roadway lanes, receiver locations, existing sound barriers and existing terrain in the area of potential impact, were digitized into a three-dimensional, scaled reference coordinate system for both existing and future conditions.

Calibration of Noise Model

Using the measured existing noise level data and corresponding traffic counts, the traffic noise computer model was calibrated as necessary in order to correctly predict noise levels at each analysis location. Traffic noise model calibration factors are listed in Table 10.

Future Noise Level Prediction

Using worst noise hour traffic volumes under design-year (2022) condition, the traffic noise model was analyzed to predict worst noise hour noise levels for design-year condition. The Traffic Noise Protocol requires that noise level be predicted using traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the existing and future conditions. Predicted noise levels are provided in Table 10.

Identification of Traffic Noise Impacts and Noise Abatement Considerations

Results from the existing traffic noise reading and traffic noise model for future-worst-hour conditions were used to determine if traffic noise impacts would occur. Traffic noise impacts occur when it is determined that the proposed project causes a substantial noise increase or predicted traffic noise levels approach or exceed Noise Abatement Criteria. A noise increase is substantial when the predicted noise levels after project completion exceed existing noise levels

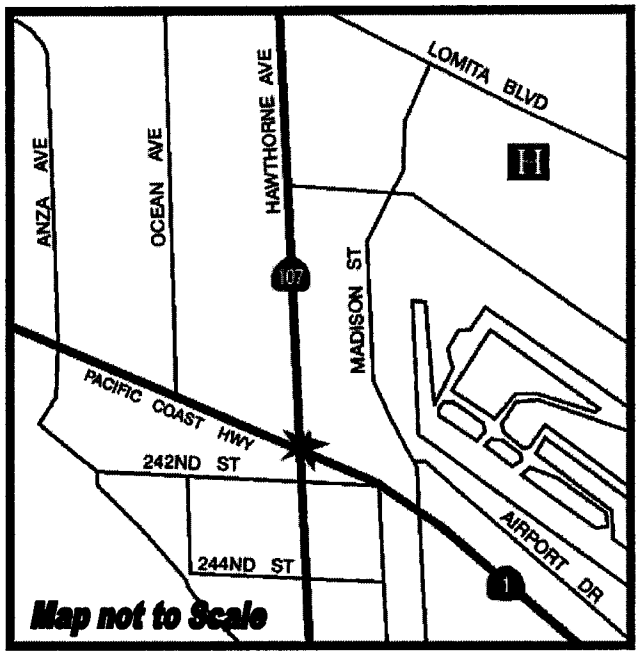
by 12 dBA - $L_{eq}(h)$. A traffic noise impact also occurs when predicted noise levels after project completion approach within 1 dBA - $L_{eq}(h)$, or exceed Noise Abatement Criteria.

APPENDIX 9 – Scoping

- Newspaper Ad
- Scoping Notification Letter
- Scoping Notification Flyer

ENVIRONMENTAL SCOPING NOTICE

The California Department of Transportation (Caltrans) is seeking public comment on a proposal to improve the State Route 1 (Pacific Coast Highway) at State Route 107 (Hawthorne Boulevard) intersection.



WHAT IS BEING PLANNED?

Caltrans is proposing to improve State Route 1 (Pacific Coast Highway) at State Route 107 (Hawthorne Boulevard) from approximately Ocean Avenue to approximately Madison Street. The intent of the project is to reduce congestion. There may be short-term environmental impacts associated with construction, and right of way acquisition may be necessary. These and other issues will be addressed in the environmental document.

WHY THIS NOTICE?

Caltrans is formally initiating studies for this project. Based on preliminary environmental studies, the resulting environmental document is anticipated to be an Initial Study/Environmental Assessment (IS/EA), leading to a Negative Declaration/Finding of No Significant Impact (ND/FONSI). Caltrans is **currently** soliciting written comments from all pertinent public agencies, private entities, and interested/affected individuals regarding any potential social, economic, community, traffic, safety, and environmental issues related to this project.

WHERE DO YOU COME IN?

Please send your written comments or inquiries by May 30, 2002 to:

Mr. Ronald Kosinski, Deputy District Director
California Department of Transportation
Division of Environmental Planning (LA-1 @ LA-107/ KP 25.7)
120 South Spring Street - Mail Stop 16A
Los Angeles, CA 90012

CONTACT?

For more information about this study or any transportation matter, call Caltrans Citizen Participation at 1-213-897-0849 or visit us at our website at www.dot.ca.gov.

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, Division of Environmental Planning
120 SO. SPRING ST.
LOS ANGELES, CA 90012-3606
PHONE (213) 897-0703
FAX (213) 897-0685

Flex your power!
Be Energy efficient!

April 24, 2002

Responsible Agencies, Review Agencies, Trustee Agencies, and Individuals Interested in the LA-1 @ LA-107 (PCH @ Hawthorne Bl) Intersection Improvement Project

File: LA-1 @ LA-107
KP 25.7 (PM 16.0)
EA: 217200
Intersection Improvement Project

Notice of Scoping/Initiation of Studies

The California Department of Transportation (Caltrans) is formally initiating studies for an intersection improvement project on State Route 1 (Pacific Coast Highway) at State Route 107 (Hawthorne Boulevard), from approximately Ocean Avenue to approximately Madison Street in the City of Torrance, in Los Angeles County. Various alternatives to improve the intersection are being considered. The intent of the project is to reduce traffic congestion. There may be short-term environmental impacts associated with construction, and right of way acquisition may be necessary. These and other issues will be addressed in the environmental document. The attached map presents the general location of the proposed study.

Based on preliminary environmental studies, the resulting environmental document is anticipated to be an Initial Study/Environmental Assessment (IS/EA) leading to a Negative Declaration/Finding of No Significant Impact (ND/FONSI). Caltrans is currently soliciting written comments from elected officials, public agencies, private entities, and any interested/affected individuals who may want to express their opinions, concerns, and/or support for the project. Topics of concern regarding the proposed project may include potential social, economic, community, traffic, safety, and environmental issues. Any opinions pertaining to these issues are welcome and will be carefully considered. It would also be appreciated if any existing facilities or planned developments, that may be either directly or indirectly impacted by this project, be brought to our attention.

Caltrans strives to work cooperatively with all pertinent parties in an effort to exchange ideas and to ensure that all factors are considered, and that a mutually acceptable project is constructed. Caltrans will be pleased to have your ongoing participation on this endeavor. Please send any written comments by May 30, 2002 to:

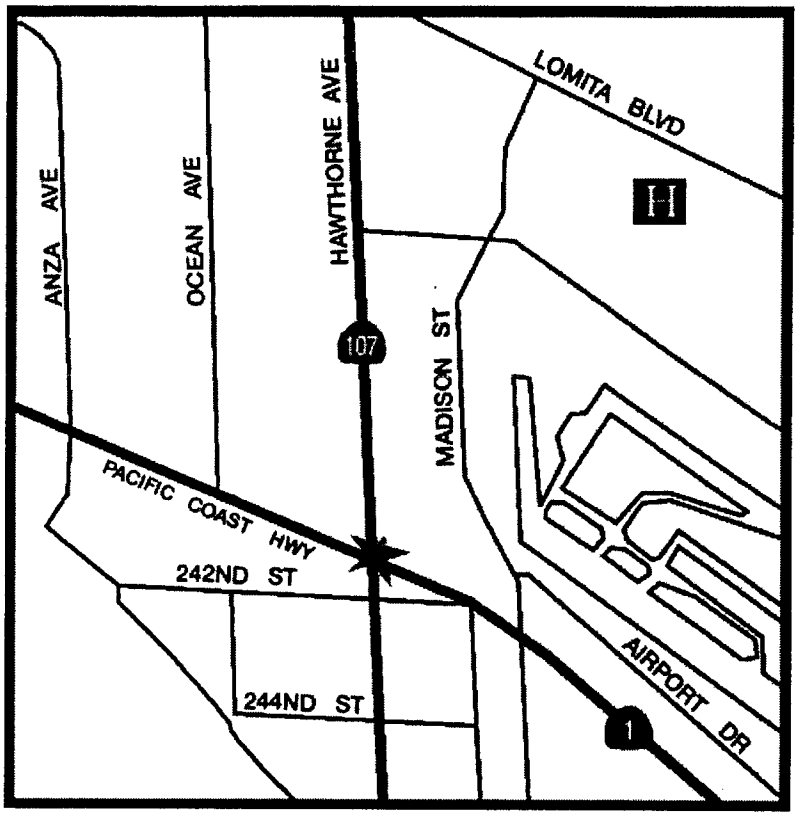
Mr. Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning (LA-1 @ LA-107/ KP 25.7)
California Department of Transportation, District 7
120 S. Spring Street - Mail Stop 16A
Los Angeles, CA 90012

Thank you for your interest and participation in this transportation project study.

Sincerely,

Ronald Kosinski
Deputy District Director

Route 1 (Pacific Coast Highway) at Route 107 (Hawthorne Boulevard) Widening Project Area



Environmental Scoping Notice

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Mr. Ronald Kosinski, Deputy District Director
California Department of Transportation
Division of Environmental Planning (LA-1 @ LA-107/ KP 25.7)
120 South Spring Street - Mail Stop 16A
Los Angeles, CA 90012

CONTACT?

For more information about this study or any transportation matter, call Caltrans Citizen Participation at 213-897-0849 or visit us at our website http://dot.ca.gov/dist07.

"Caltrans Improves Mobility Across California"

APPENDIX 10 – Public Comments Received During Scoping Period

5-3-02

Some possible solutions:

1. Traffic signal @ Hawthorne Blvd and Skypark D
   - Many motorists use this shortcut to Crenshaw Blvd. More might do so if the signal for turning lasted longer.

2. Connect 238th and/or 239th Sts. to Anza and then PCH.

3. Far out solution:
   Construct an overpass from ~~PCH to~~ Anza to Madison with limited PCH surface traffic underneath.

Sincerely,

May 5, 2001

Ron Kosinski RK
Deputy District Director of Environmental Planning

Dear Ron

I have lived on Neece Ave. for the last 20 years. First, let me thank-you for finally asking for input from the people who live in the neighborhood. We have endured the dangers of Cut-Through traffic for many years. Our children face the dangers from 70mph drivers who seem to think they have the only children in the world, and they are safe at home. Each and every afternoon from 4:00pm until 8:00pm cars use Neece Ave. to dodge the congestion at Hawthorne Blvd. and PCH. These cars are traveling southbound on PCH and when the light turns red, they start turning right on Neece Ave. These cars accelerate down Neece Ave. and use either 242nd. Street or 244th Street, or worst yet, they race all the way up to Newton, making a left turn, and return back to Hawthorne Blvd. (See attached drawing.) There are numerous reasons for this congestion: The bus stop prevents cars from turning while it is stopped in a traffic lane. Then the pedestrians exit the bus and cross the street during the next green light. As you can see, two sets of green lights have passed and not a single car has been able to turn right. These drivers are frustrated and find alternate routes so they don't have to wait for the third series of signal changes. Even when the bus is not occupying the lane, drivers continue to put our children at risk to avoid the lengthy wait of making their right turn at Hawthorne Blvd. Neece Ave. is a residential street without sidewalks or curbs. Our children must walk down the street and share the roadway with the traffic. They should not be exposed to cut –through traffic accelerating down a residential street, to avoid the long wait of making a right turn onto Hawthorne Blvd.

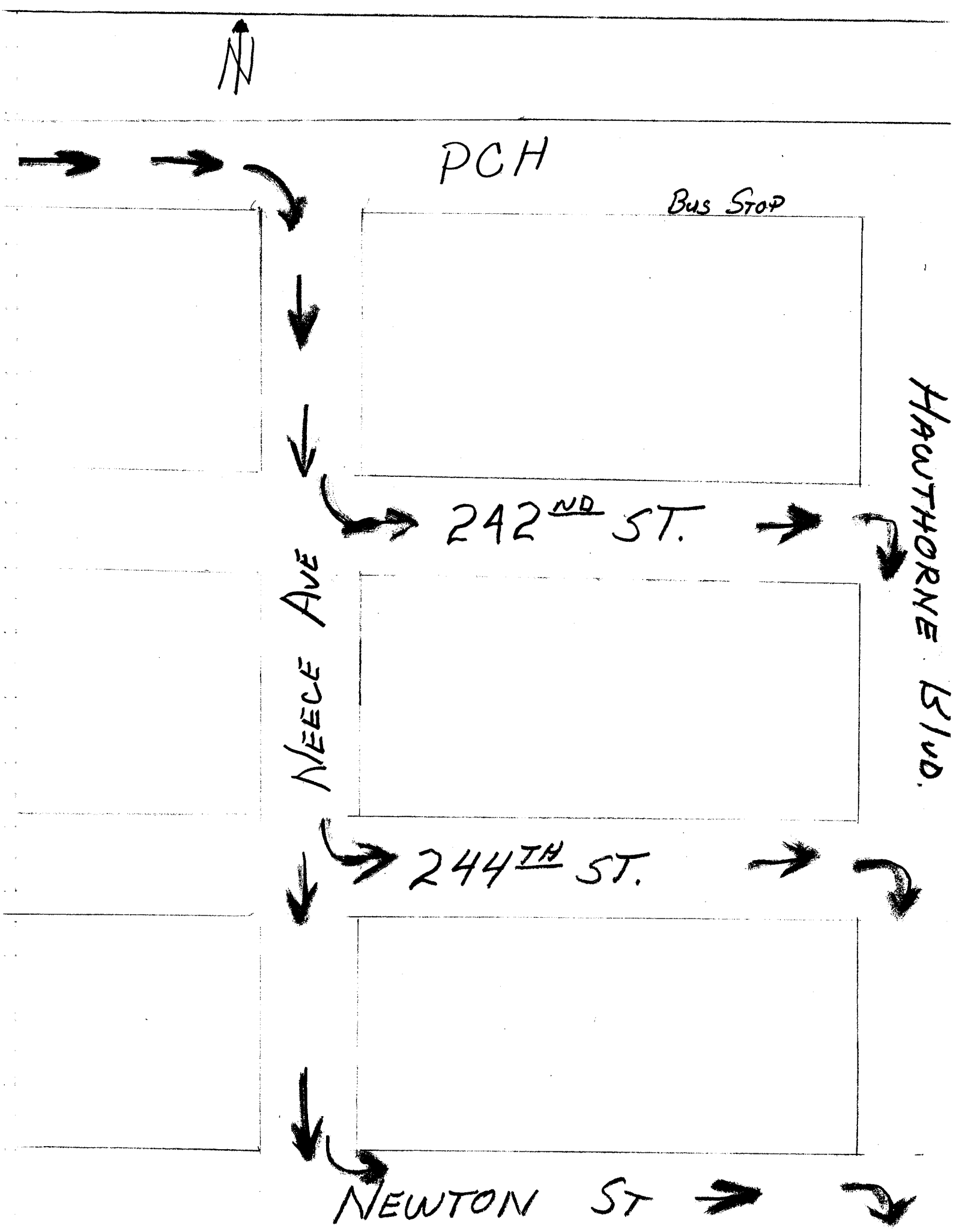
One solution to this problem is to make Neece Ave. not accessible during these peek rush hour times. A No Right Turn sign, along with local enforcement, would help make our residential street safer for all of our children. Another solution is to move the bus stop east of Hawthorne Blvd. This would keep the bus from blocking traffic and the pedestrians would not have to cross Hawthorne Blvd.

Please consider the residents on Neece Ave. when making the well overdue changes to the Hawthorne Blvd and PCH intersection.

Thank-you for your time.

Sincerely;

Ralph D. Moore
24249 Neece Ave
Torrance, Calif. 90505


N
PCH
Bus Stop
242ND ST.
HAWTHORNE BLVD.
NEECE AVE
244TH ST.
NEWTON ST

Tom Newman
3823 Bluff St.
Torrance, CA 90505

May 10, 2002

Mr. Ronald Kosinski, Deputy District Director
California Department of Transportation
Division of Environmental Planning (LA-1 @ LA-107/ KP25.7)
120 South Spring Street – Mail Stop 16A
Los Angeles, CA 90012

Dear Mr. Kosinski:

I applaud the studied "traffic calming" at the intersection of Hawthorne and PCH in the City of Torrance.

As you no doubt are aware, vehicles attempting left turns onto Hawthorne Boulevard frequently have to wait for the traffic signals to cycle several times, particularly during peak traffic hours. Two additional left-turn lanes on PCH, one Northbound and one Southbound, would facilitate traffic flow greatly.

The private sector would have to relinquish several yards of PCH frontage to provide 2 left-turn lanes, but in the balance of greatest public good, it deserves serious consideration.

Thank you.

Sincerely,

Tom Newman

RANCHO PALOS VERDES
DEPARTMENT OF PLANNING, BUILDING, AND CODE ENFORCEMENT

13 May 2002

Ronald J. Kosinski, Deputy District Director
Division of Environmental Planning (LA-1@LA-107/KP25.7)
California Department of Transportation, District 7
120 S. Spring St., Mail Stop 16A
Los Angeles, CA 90012

SUBJECT: Notice of Scoping/Initiation of Studies for Intersection Improvements at Pacific Coast Highway (SR-1) and Hawthorne Boulevard (SR-107)

Dear Mr. Kosinski:

The City of Rancho Palos Verdes is in receipt of the above-mentioned notice. We have reviewed the project description, and we believe that the proposed project will have no impact upon the City of Rancho Palos Verdes and its residents. As such, we have no comments to offer on the proposed project at this time.

If you have any questions or need additional information, please feel free to contact me at (310) 544-5228 or via e-mail at *kitf@rpv.com*.

Sincerely,

Kit Fox, AICP
Senior Planner

cc: Joel Rojas, Director of Planning, Building and Code Enforcement

M:\Border Issues\20020513_ScopingNoComment_Caltrans.doc

MAY 13, 2002

DEPARTMENT OF TRANSPORTATION
SOUTHERN RIGHT OF WAY REGION
DISTRICT 07 RIGHT OF WAY FIELD OFFICE - PHONE (213) 897-1901
120 SOUTH SPRING ST. (213-897-8902 JOHN NJOROGA
LOS ANGELES, CA 90012-3606

ATTENTION: MR. ROBERT SASSAMAN, DISTRICT DIRECTOR ~~DEPARTMENT OF TRANSPORTATION~~ OF TRANSPORTATION.

DEAR BOB

REC'D FROM MY RELATIVE, COPY OF LETTER DATED MAY 2, 2002 SIGNED BY JOHN NJOROGA AND YOUR FULLY UNDATED LETTER OF MAY -, 2002 CONCERNING ASSESSORS PARCEL # 7534-001003 LOCATED AT 3720 PACIFIC COAST HWY, TORRANCE, CA 90503, LA I-PM5TH-KP 25.7, E.A. 217200.

PLEASE HAVE YOUR OFFICES CORRECT THE MAILING ADDRESSES TO READ "TAKA NAKANO, 116 MAC DOUGAL ST, APT 5 FN." AND NOT INCLUDE LNSHFI, INC WHICH IS LOCATED AT 6759 LANGRELL WAY, SACRAMENTO, CA 95831. SINCE I TRAVEL TO MY 2ND HOME OFTEN AT 2158 CANAL AVE, LONG BEACH, CA 90810 (PHONE # 562-436-4242), I WOULD APPRECIATE MAIL TO BE SENT TO BOTH ADDRESSES.

YOUR UNDATED LETTER "PERMIT TO ENTER FOR HAZARDOUS WASTE" WAS SIGNED BY TAKA NAKANO MAY 7 '2002 JUST BEFORE SHE WENT TO THE COUNTRY OF TURKEY FOR A 2 WEEKS VACATION AND SHE SIGNED THE DOCUMENT WITH HER NAME "TAKA NAKANO LNSHF, INC" WITHOUT MY APPROVAL. BESIDES MYSELF, THERE ARE 8 OTHER OWNERS OF THE PROPERTY.

FOLLOWING ARE THE NAMES WHICH SHOULD BE REQUIRED TO SIGN.

PAGE 2 OF 3 MAY 13, 2002

MARY NAKANO (1-212-674-2475)
116 MACDOUGAL ST APT 5RN
NEW YORK, NY 10012

LORRAINE NAKANO
7803 LIVINGSTON AVE
WAUWATOSA, WI 5312

HELEN NAKANO
P.O. BOX 861084
LOS ANGELES, CA 90086-1084

AMY NAKANO
2054 N. HUTCHINSON ST
CHICAGO, IL 60618

DRILLING

Regarding the [redacted] for pollution testing, you should contact either both the city of Torrance or LA County for results as my relative, Mary Nakano, had tests done in the early 1990's at a cost of about $25,000. If further tests are required by Cal Trans, will the costs be borne by Cal Trans?

Received earlier, copy of Cal Trans declaration of Negative Declaration which has deadline of May 30 to respond. Have all the residents and business in the vicinity been notified of the negative declaration?

 MAY 13, 2002

Please excuse my scribbling due a pinched nerve in my writing arm.

All my relatives owning a share of the property do not understand the implications of a Negative Declaration, would you explain what is the difference between the Negative Declaration, an environmental impact report and environmental impact statement. Also would appreciate a detailed plan of the proposed right of way acquisition and traffic diagrams showing peak hour volumes and average daily traffic volumes for all legs of the intersection including 242 nd St. Please mail copies of the requested information to all the names listed on page 2 plus to Taka Nakano, myself and our lessee Jack in the Box, Inc. (for store # 275). Jack in the Box headquarters is 9330 Balboa Ave, San Diego, Ca 92123.

Sincerely
Lawrence H. Nakashima

LAWRENCE H. NAKASHIMA (916) 428-7268
PRESIDENT, LNSHFI, INC.
6759 LANGRELL WAY
SACRAMENTO, CA 95831

Since I sometimes travel to my 2nd residence in Long Beach, please also mail all info to me at 2158 Canal Ave (562) 436-4747
Long Beach, Ca 90810

cc TAKA NAKANO
MARY NAKANO
LORRAINE NAKANO
AMY NAKANO
HELEN NAKANO
JACK IN THE BOX

P.S. To BOB SASSAMAN,
I worked 38 years in District 7 and Headquarters in Sacramento, In Sacramento, worked for Pete Doljanin and Jim Ketchen before retiring.

Steve Bradley
2838 Winlock Road
Torrance, CA 90505
(310) 530-1978

May 20, 2002

Ron Kosinski
Deputy Director of Environmental Planning
120 S. Spring St. *Mail Stop* **16A**
Los Angeles
CA 90012

re: **Intersection - *Pacific Coast Highway* and *Hawthorne Blvd.*, in the city of Torrance**

I am writing to provide comments concerning this intersection and proposed enhancements.

- **Hawthorne Blvd at P.C.H. - North bound RIGHT hand (onto P.C.H. east) turn lane:**
This lane currently backs up traffic dramatically. Either a bus is unloading just north of the intersection, or a big rig with a trailer has not negotiated the turn properly and is either over the median into the turn lane (west P.C.H., turning onto south Hawthorne Blvd.), or is trying to back up to re-negotiate the turn to proceed east on Pacific Coast Highway. This happens A LOT !!!!

- **Hawthorne Blvd at P.C.H. - North bound LEFT hand (onto P.C.H. west) turn lane:**
These lanes currently back up traffic, causing many motorist to cruise through the residential areas, rather than sit through 2 or 3 left hand turn signals. The timing vs. sensors on this turn signal is either not properly timed or is not sensing the amount of traffic properly. Having the 2 lanes is better than the previous 1 lane, but is still not moving the traffic effectively.

- **Hawthorne Blvd at P.C.H. - South bound LEFT hand (onto P.C.H. east) turn lane:**
These lanes usually flow fairly well, but the timing or sensing of the traffic waiting to turn could be enhanced. This would probably greatly reduce the traffic going around the shopping center and using Madison Street.

- **P.C.H. at Hawthorne Blvd - East bound RIGHT hand (onto Hawthorn Blvd. south) turn lane:**
This lane currently backs up traffic considerably when a bus is unloading just east of the intersection. I don't think that a *Turn Only* lane here would help, instead of hurt.

- **P.C.H. at Hawthorne Blvd - East bound LEFT hand (onto Hawthorn Blvd. north) turn lane:**
This lane currently sees a great deal of turning traffic. The timing or sensing on this signal could use some enhancement, to sense traffic and lengthen the turning signal time.

Thank you for your time,

Steve Bradley

CITY OF
TORRANCE

FIRE DEPARTMENT
FIRE PREVENTION DIVISION
HAZARDOUS MATERIALS DIVISION

May 23, 2002

Department of Transportation
District 7, Division of Environmental Planning
120 So. Spring Street
Los Angeles, CA 90012-3606

ATTENTION: Ronald Kosinski, Deputy District Director

SUBJECT: Intersection Improvement Project-PCH @ Hawthorne Blvd, Torrance, CA

Mr. Kosinski,

The Torrance Fire Department will require an OPTICOM system to be installed at the affected intersections. This is consistent with improvements that we have made for other intersections in the City of Torrance. We have reviewed the site and find that this is our only requirement. The intersection at PCH and Hawthorne can be quite congested at any time during the day or night and any improvement to the increase the traffic flow through would be helpful.

Thank you

TORRANCE FIRE DEPARTMENT
Richard V. Bongard, Fire Chief

K. M. Hall, Battalion Chief
Fire Marshal

May 26, 2002

TO: Ronald Kosinski
Deputy District Director, CALTRANS

YOUR FILE:LA-1@LA-107)
KP 25.7(PM 16.0)
EA: 217200
Intersection Improvement Project

FROM: Mary Nakano, an Individual Interested in the LA-1(a) LA-107 (PCH @ Hawthorne Bl) Intersection Improvement Project

cc: Robert Sassaman, District Director
Co-Owners

RE: Your Notice of Scoping/Initiation of Studies - of April 24, 2002

Dear Mr. Kosinski:

Your Notice states that "various alternatives to improve the intersection are being considered" and that "the intent of the project is to reduce traffic congestion." You welcome "any opinions pertaining to these issues." And you state, "CALTRANS strives to work cooperatively with all pertinent parties in an effort to exchange ideas and to ensure that all factors are considered, and that a mutually acceptable project is constructed;" and "CALTRANS will be pleased to have your ongoing participation in this endeavor."

Pardon this writer for repeating verbatim your welcome communication which I can hardly believe coming from Government (State, in this instance), this Owner of property in Torrance, CA having been beaten down, and still being, with incredible disrespect by City government for the past decade, of contempt by total silence to my appeals for cooperation and collaboration regarding my family's last acre belonging to us for over 85 years. By what I now understand to be their "business-as-usual" we are now tightly prevented from leasing our property for over six years, at loss calculated in potential revenues of over One Million Dollars, by means of a 1996 City Council Resolution effected by mutually-interested collaboration a ban specifically prohibiting the Carwash business on our property. Since 1965 there has been a Carwash there because it is undeniably the most appropriate business on a site uniquely shaped for it - shaped by the cutting-through of our original 15 acres to create Pacific Coast Highway in the early '30s.

We are now caught in a classic 'Catch-22' with panoply of the powers, authorities and influences of City government against us Owners of this prized site, one of the last, if not last, of such kind there, I'm told. This consolidation of powers does not respond since 1997 to any of my letters and request just to explain this surprising Ban on Carwash usage on our site, addressed to the City Manager, two elected Mayors, Director of Planning Department, and the City Council. There is only an eerie silence.

This situation, and fact that since the late '80s unabatedly there are calls from developers 98% of them interested to build a Carwash Mall there, therefore compel me to ask you, Mr. Kosinski, how could we be faulted now for jumping at this opportunity, at last, for a venue possibly leading us out of this 'Catch-22' to permit us to have developed a Carwash Mall?

This Owner's 'vision' includes ambition to gentrify and enhance what is now a tawdry pedestrian location without Form or Style which this unique site has potential for offering. If permitted by Governments I am confident that in the end everyone should benefit and be very glad indeed happy - Community, commercial neighbors, residents of neighboring Palos Verdes Estates and Rolling Hills, pedestrians and motorists - to pause at an oasis-like spot on the two major highways, with elegant amenities such as the tiny spaces serving the finest Italian espresso coffee standing up, selling corsages of exotic blooms (custom of the Art Deco years), and above all an International Newspaper Stand to serve the diverse cultures around this Area. There are developers I know waiting in the wings for many years for the ban to be rescinded so that Progress will no longer be impeded.

I share with you, Sir, this context in detail because my comments, ahead, would be a reflection of this unfortunate situation, and which relate to your concerns of this Project of CALTRANS'.

Further into the context - with the sudden death in 2000 of the notorious instigator of the Ban, owner of a Carwash in Torrance and popular manipulator of City government there, who had

been madly covetous of this site and rejected by Owners for sale or lease - the City seemingly in his place apparently then covets it now.

In 2001 I successfully warded off collaborative efforts by the City Attorney's Office, the City Manager and the Planning Department (the leader), to intimidate and force me to sell the site to the City, however carefully avoiding the words "eminent domain".

Now, let me respond generally to your Notice regarding this site. Because of its position at the hub of the Intersection under review here, "one of the most important in Torrance," according to the Late David Ferren, Director of Planning in Torrance, I am naturally interested as Individual to participate in Governments' endeavors to improve "traffic congestion" there. I'm also naturally wary and uncomfortable about having our Triangular site sliced off on two sides which are major highways, because it's barely one acre in size.

But my representative in 1997 had conveyed to Mr. Ferren our approval re the several feet to be sliced off on the Hawthorne Blvd. side, in accordance with the City's Hawthorne Blvd. Corridor SPECIAL PLAN (Manual, 1996). We also voiced then our dissatisfaction with the inequity regarding exchange of areas with the slicing-off, because of the great difference in property values of the two sides, even with slightly more of 242nd St. offered us. (The difference should be greater regarding PCH to be sliced off by CALTRANS.)

Therefore, recently I had suggested to the Planning Department (unresponded to) that in compensation for the six years' damage we suffered as result of their concerted egregious behaviors toward us Owners, including that of One Million Dollars in potential revenues lost, the City give us that small portion of this site acquired by the City some years ago which, anyway, the City, according to its SPECIAL PLAN, will cut in half to create a triangular Pedestrian Island at the Intersection for the new RIGHT TURN from Hawthorne to PCH. I believe in terms of the whole Design of the Triangle it would be more sensible to be treated

as part of our Design for the anticipated Carwash Mall, which most likely would be used as Public space and as place for Signages indicating THE CITY OF TORRANCE, pointing to the CORRIDOR, ie. for enhancement of Imagery and for directional purpose.

Following are my questions and comments in response to your Notice of April 24, 2002: -

1. Firstly, have I presumed correctly that your 'intersection improvement project' is a collaborative one with the City's Hawthorne Blvd. Corridor SPECIAL PLAN? (In perusing this Manual I have not rid myself of feeling of intimidation by the overwhelming nit-picking details of the PLAN, obsessively technocratic, florid and vague in language.)
2. CALTRANS has jurisdiction over our 150' frontage on PCH in this Project. Our site is unique in several ways, notably in its Shape of a slim Triangle. We fervently hope that CALTRANS (and the City) can respect the integrity of its Design-Shape of Triangle.
3. Thank you for the "topics of concern regarding the proposed project" to include "potential social, economic, community, traffic, safety, and environmental issues."
   In my view, it would be brutal, ugly and insensitive to inflict an abrupt change from Residential to Commercial atmosphere on Residents across the Street from the site on 242nd St. where 'Residential' exists; it becomes Commercial on our side. The City's PLAN requires buildings constructed be nearly flush to the sidewalks, apparently in expectation of many buildings built for stores and offices. This would be terribly wrong, not only for social and aesthetics concerns but also re traffic congestion and air pollution concerns, and when Prosperity must be measured in direct proportion to increased number of cars ingressing and egressing there, that would be a legitimate concern, in my view. The Carwash Mall, on the other hand, means a landscaped area with spots of green spaces with the Triangle fringed with Trees (miniature Baby White Palms?) (CALTRANS originally planted the trees there, which grew too tall and were removed several years ago by CALTRANS

4. Re Air Pollution. The Carwash is about Washing and Cleaning, by nature of its process. And if Air Pollution is related to idle motorcars and many of them, the nature of the Carwash business prohibits but a limited number of motorcars there at one time.

5. Re Traffic Congestion. I am aware that there is some congestion at this Intersection, ever since being told in the '80s many times that it has one of the highest traffic counts in the area, also from "grassroots" conversations with callers from South Bay Area especially Torrance, Palos Verdes Estates and Rolling Hills, and longtime residents of Torrance with daily view of the Intersection. Recently when asked his opinion of one of them on this, a resident stated that traffic congestion there is "no better no worse than at other intersections;" however, he notes that "big trucks have difficulty making turns there."

6. Re Expanding the Highways to Relieve Traffic Congestion at the Intersection. To the best of my inexpert knowledge, Hawthorne Blvd. and PCH are different in this regard: PCH should justifiably be widened for more lanes to dilute traffic. But contrary to the City's SPECIAL PLAN, in my view Hawthorne Blvd. SOUTH OF PCH should be spared such equal drastic 'improvement' as for PCH, at least at this time, the costliness in other terms than money to be inflicted on everyone, unnecessarily. This is, I assure you, not self-serving comment: Because the vitality of the commercial zone begins and exists more NORTH FROM PCH on HAWTHORNE BLVD. AS WELL AS ALONG PCH, with atmosphere and environment (along Hawthorne) SOUTHWARD from PCH being, relatively, yet Residential to NORTHWARD from PCH - of hilly curving road, more reason not to slice off this site on Hawthorne Blvd. which lies SOUTH OF PCH. Let the widening begin NORTH from PCH.

My conclusion stems also from a socio-cultural-philosophical 'take' linked to certain phenomenal happenings recently, indicating alarming changes in our society:

7. I see a correlation between the bland friction-less lifestyle exemplified by Southern California Living when added to that raging adolescent hormones - with the mass-killing binges for instance in Schools, when Life is made devoid of any discomfort (it seems to be a Commercial-Business goal), with instant gratification of whatever desired also cooked up by the entertainment and food industries, and therefore traffic waits can drive some people crazy.

   Such a life inwardly can become painful for not understanding the emptiness accompanying such gratification - unless there is training (education) to learn the joy and pleasure in the pursuit of Art and Culture, which is not the reality for the majority of the population. Instant hi-sensational moments and things bought do not permanently fill the empty void, in fact create more void after they satiate. So, What's wrong with being forced to 'suffer' a bit of waiting for traffic to ease enough to "GO!"? — waiting stimulates mind and emotions that may require self- or societal curbing, for the common good.

   The waiting I refer to is that of the short distance referred to in para.6, page 5. As stated before, our site here lies within that distance.

   I also repeat in conclusion of this issue, that the solution to this perceived problem of intolerable traffic congestion is Traffic Control with rules and regulations, a System. Together with whatever degree of benefit from improvements to PCH, I truly believe the problem on Hawthorne Blvd. could be resolved when attention is paid regarding the socio-cultural-philosophical factors which are REAL and must be perceived first.

However you deem or interpret the foregoing comments — please know they are thoughtful ones and always focused on the bigger picture of community, environment, and relationship with our neighbors closer to us Owners than is Torrance — Palos Verdes Estates and Rolling Hills. whose residents, I know from contact, would welcome my 'vision' which is absolutely

in sync with the realities there. Unfortunately this site became captive to the endemic politics and corruption by the City now more enchanted by the politics of Money-Property-Power because Torrance is now a wealthy corporate body. Residents or Public relying on obtaining permits are treated with bland contempt, flatly denied permits without given reasons, matters of livelihoods, not by officers but young bland interns, inflexibly, in manner more Totalitarian, absolutely not Democratic. And therefore this Owner's "J'ACCUSE!"

Owners' goal is firstly to protect our property rights given by the State of California. Then to go forward practically working with a developer to create a 'vision' of an Art Deco-style Carwash Mall with Special Amenities, which has withstood the challenges of Time and two Recessions. We are ready to say that whoever rejects and denies the validity of this 'vision' is an enemy of Progress and of the residents of Torrance, in fact all Public.

Who has spoken here is an Octagenarian, and retired International Civil Servant with rich life experience mostly abroad, where I had noted in post-War Italy that to be poor and inconvenienced by hardships may be a happier state to be in compared with a life of full-gratification and total comfort that leaves an empty painful mental void, alleviated only by pursuit through education of Art and Culture, which is not the case for most people. The streets of Rome in 1952 were immaculately clean because cigarette stubs and scraps of paper were picked up for re-use. And when TV antennae proliferated and cars replaced bicycles and motorscooters, there appeared a new professional on the scene - the Psychiatrist Therefore I say, What's wrong with a bit of 'suffering' waiting for the traffic to ease up? It's good for the soul and correct societal control forces people to know they're not alone And it feels good to be doing your little bit as part of the whole life, anyway. Perhaps I would not go on tediously preaching, had I not had a whiff of a sense of our mortality, living here just a mile away from Ground Zero on that September 11th day. It supports my

lifelong intolerance for what is not Truthful and Beautiful (the same thing). For 47 years this family Owners of this site did not benefit from its development, purely because we had been captive also to villainy, politics and corruption. My sisters and I at 79, 81 and 89 still resilient and optimistic would like a change. Sexism had everything to do with our victimization, moreover, you bet!

Finally, you can hear what was the purpose of your Notice, and I'm pleased to say that CALTRANS Project and its plan which is (?) to widen (how much?) Pacific Coast Highway, is on principle accepted by us Owners.

I should very much like to know your response (if this hasn't put you to sleep) to this letter, my "J'ACCUSE!" against the City, not CALTRANS. Just in case you'd care to chat some more, don't hesitate to call me at (212) 674-2475 (we're three hours ahead of you).

Thank you, Mr. Kosinski, for your good letter.

Sincerely,

Mary Nakano

Mary Nakano

cc: City Manager LeRoy J. Jackson, City of Torrance
John Njoroge

P.S. My daughter is into Urban Planning, after Architecture (Rome University) in Switzerland (Geneva) at this moment. For us above issues (including Art History for me) are of mundane daily interest to us. Let us never forget Aesthetics.

May 29, 2002

TO: Ronald Kosinski
Deputy District Director, CALTRANS

YOUR FILE:LA-1@LA-107)
KP 25.7(PM 16.0)
EA: 217200
Intersection Improvement Project

FROM: Mary Nakano, an Individual Interested in the LA-1(a) LA-107 (PCH & Hawthorne Bl) Intersection Improvement Project

cc: Robert Sassman District Director
Co-Owners

RE: Your Notice of Scoping/Initiation of Studies of April 24,2002 and my response of May 26, 2002 - My misperception of the identities of PCH and Hawthorne Blvd.

Dear Mr. Kosinski:

I've just been corrected on a big clean error, having always believed that Hawthorne Blvd., until PCH was cut through in the early '30s, was 'Route 1, or 101', had never heard of 'Route 107', and always knew PCH as 'PCH'.

This error in no way changes my opinions, attitudes and conclusions expressed in my complex discourse in my response of May 26, 2002.

Per agreement with Lawrence H. Nakashima who inconveniently contacts officials without first consultation with me, as relative newcomer as co-owner, please correspond with me to simplify matters; and as usual whatever necessary information will be disseminated properly to all co-owners by me.

Sincerely yours,

Mary Nakano Mary Nakano

cc: Lawrence H. Nakashima

PROGRAMMATIC SECTION 4(f) EVALUATION

SECTION 4(f) EVALUATION

U.S. Department of Transportation Act Section 4(f) Evaluation

State Route 1/State Route 107 (Pacific Coast Highway/Hawthorne Boulevard)

Intersection Improvement Project

In the City of Torrance

Los Angeles County, California

State of California Department of Transportation

and

U.S. Department of Transportation

Federal Highway Administration

Pursuant to 42 U.S.C. 4332(2)(c) and 49 U.S.C. 303

October 2002

PROGRAMMATIC SECTION 4(f) EVALUATION

1. Introduction to Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified in Federal law at 49 U.S.C. § 303, declares that "[i]t is policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that "[t]he Secretary [of Transportation] may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over park, area, refuge, or site) only if-

(1) There is no prudent and feasible alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use"

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and Housing and Urban Development in developing transportation projects and programs which use lands protected by Section 4(f).

In general, a Section 4(f) "use" occurs with a DOT-approved project or program when (1) Section 4(f) land is permanently incorporated into a transportation facility; (2) When there is a temporary occupancy of section 4(f) land that is adverse in terms of the section 4(f) land that is adverse in terms of the Section 4(f) preservationist purposes as determined by specified criteria (23 CFR § 771.135[p][7]); and (3) When Section 4(f) land is not incorporated into the transportation project, but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired (construction use). 23 CFR §§ 771.135(p)(1) and (2).

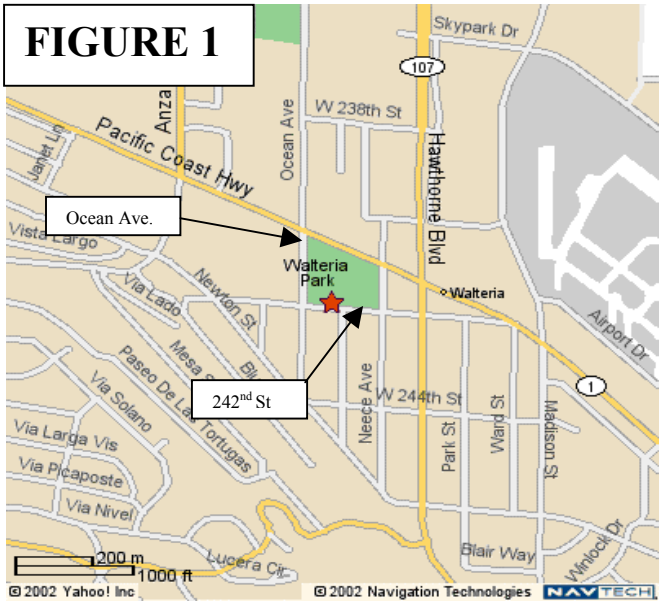
2. Proposed Action Relative to Section 4(f)

The California Department of Transportation (the Department) proposes to improve traffic flow and safety at the intersection of State Route-1 (Pacific Coast Highway, PCH) and State Route-107 (Hawthorne Boulevard) through an intersection improvement and reconfiguration project. The proposed project area is located in the City of Torrance, in

Los Angeles County (Figure 1). The action is intended to widen and upgrade the intersection via the acquisition of right of way, the construction of dedicated right and left-hand turn pockets, restriping, and resignalization.

A total of three (3) project alternatives have been considered, including the "No Build" alternative. Both build alternatives require that land be acquired from Walteria Park. Section 1 of the accompanying EA/IS include a discussion of the proposed project's Purpose and Need. Section 2 of the accompanying EA/IS provides a full description of the proposed project, and a detailed analysis of the 3 alternatives that comprise it. The Appendices Section of this Section 4(f) Evaluation include layout maps which clearly depict and identify the relationship between the proposed project build alternatives and Walteria Park.

FIGURE 1



3. Description of Section 4(f) Property

Walteria Park is a 4.5-acre park in the City of Torrance, in Los Angeles County, CA. The park is located at 3855 242nd Street, its northernmost side bordering the proposed project area on Pacific Coast Highway from the south side. Walteria Park is owned and maintained by the City of Torrance, and is one (1) of forty (40) parks in that city. Walteria Park has no other relationship to any other lands in the City of Torrance. There are no County, State, or National Parks in the City of Torrance.

Please see the Appendices section of this Section 4(f) Evaluation for a list and map of the City of Torrance park system, as well as a layout map of Walteria Park which includes the location of its facilities. Walteria Park offers:

- Picnic areas
- Jungle gyms and recreation activities for children
- Baseball diamonds
- Cultural arts center
- Rental of park buildings

Figure 2 presents photographs of Walteria Park.

FIGURE 2

Walteria Park is completely accessible to pedestrians along the entire south (242nd St.) and west (Ocean Ave.). The park is accessible to maintenance vehicles on the west side. There is currently no access from PCH or Hawthorne Boulevard. There used to be access from PCH (north side of the park), but both entrances were closed off due to vandalism

problems and pedestrian/vehicle conflicts at nearby fast food parking lots, according to the City of Torrance.

The City of Torrance indicated the following Walteria Park usage statistics:

- Organized Programs Daytime usage M-F = 200-300 people/week
- Organized Programs Evening usage M-F = 300-350 people/week
- Drop-in Daytime usage M-F = 125 people/week
- Drop-in Evening usage M-F = 50 people/week
- Drop-in Daytime usage Sat. & Sun = 100 people/week
- Building Rental Evening usage = 120 people/week
- Picnic usage = 200 people/weekend

4. Impacts to the Section 4(f) Property

4.1 Amount of Land to be Acquired and Impacted Facilities

The parkland proposed for acquisition is located at the northernmost outer edge of the park, where it borders the south side of PCH. The proposed project will not impact any park facilities since the area proposed for acquisition is small, and since it will be limited to the northernmost outer edge of the park.

Walteria Park is 4.5-acres in area. Alternative 2 requires that approximately 4.3 square meters (0.001 acres) be acquired from Walteria Park. Alternative 3 requires that approximately 36.2 square meters (0.009 acres) be acquired. That's 0.02% and 0.2% of parkland proposed for acquisition, respectively. Thus, a significant impact to Walteria Park is not anticipated as a result of the proposed action. Please see the Appendices Section of this Section 4(f) Evaluation to view the design layout maps which clearly depict the acquisition impacts to Walteria Park.

4.2 Impacts to Accessibility

There is currently no pedestrian or vehicular access to Walteria Park from either PCH or Hawthorne Boulevard. The proposed project can be expected to impact vehicular accessibility to the park temporarily during construction however. The anticipated accessibility impacts will be primarily to Walteria Park-bound vehicular traffic which may experience construction-related traffic congestion and delays at the intersection. Impacts to pedestrian access are not anticipated. Walteria Park is accessible to pedestrians along the entire south side (242nd St.) and west side (Ocean Ave.).

Pedestrian access at the intersection itself will be impacted temporarily during construction however. Pedestrians will not be allowed in construction areas, and thus pedestrian traffic will be re-routed. The proposed pedestrian traffic detouring plan will be presented at the public hearing, as well as in the Final draft of this document.

4.3 Noise Environment

Sound level reading, traffic counts and pertinent field data such as traffic flow speed and topography of the locations were used to develop the traffic noise model for the analysis. The traffic noise model was then used to predict future noise levels in order to identify traffic noise impacts. Future noise levels were considered for a design period of 20 years. The computer program SOUND2000, Caltrans' computer version of the FHWA's Traffic Noise Prediction Model (FHWA-RD-77-108), was used in this analysis to develop the traffic noise model for both existing and design-year conditions (Year 2022).

Future noise levels were predicted using traffic characteristics that would yield the worst hourly traffic noise impact on a regular basis. Percentages of cars, medium trucks, and heavy trucks were considered to remain the same in future as that of the present.

Walteria Park was determined to have an area of frequent human use along PCH. The future predicted noise level at this park is 65 dBA-L_{eq}(h) which is below the required 67 dBA-L_{eq}(h) under Activity Category B. Thus there will be no noise impacts to the park.

During the construction phases of the project however, noise from construction activities will temporarily and intermittently dominate the noise environment in the immediate area of construction, which includes Walteria Park. However, construction noise is regulated by Caltrans standard specifications, Section 7-1.01I, "Sound Control Requirements". These requirements state that noise levels generated during construction shall comply with applicable local, state, and federal regulations and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications. Furthermore, all construction related noise impacts will only be temporary in nature, and thus not considered significant.

4.4 Visual

Visual resources of the proposed project area and surrounding areas are a function of both the natural and the built environment. Resources associated with the natural environment of the proposed project area include the scenic views of the Palos Verdes Peninsula and the Pacific Ocean. The Palos Verdes Peninsula is a prominent feature which dominates the visual character of the area, and represents the primary scenic resource. Another resource are the Santa Monica Mountains are visible in the far distance on a clear day.

The miniscule portion of Walteria Park that the Department proposes to acquire does not contain any scenic vistas, or scenic resources such as mature trees, rock outcroppings, or other type of unique geological or topographic features. The acquisition will not result in the obstruction of any scenic vistas or views open to the public or create an aesthetically offensive site open to public view, or substantially degrade the existing visual character or quality of the site and its surroundings.

4.5 Biological Resources (Vegetation and Wildlife)

The proposed project area, including Walteria Park, is situated in a highly urbanized area in the City of Torrance, outside the vicinity of any natural drainages, streams, or creeks. The park area proposed for acquisition was deemed absent of any native vegetation, and absent of any as sensitive, threatened, endangered, and proposed plant and animal species habitat, aquatic or terrestrial. The proposed project will not adversely impact wetlands, wildlife corridors, species diversity, or impede any habitat conservation efforts.

The biological study was based on review of aerial photographs, the proposed project plans, a site visit, and a search of the California Department of Fish and Game Natural Diversity Database (CNDDB).

4.6 Air Quality

The proposed project will not violate, conflict with, or obstruct implementation of any air quality plans or standards. The proposed project is consistent with the 2001 Regional Transportation Plan (RTP) prepared by the Southern California Association of Governments (SCAG). SCAG's RTP was adopted by the SCAG Regional Council on May 5, 2001 and approved by the U.S. Department of Transportation (FHWA/FTA) on June 8,2001.

Air pollutant emissions associated with the project will me mainly limited to temporary construction related air quality nuisances. These emissions would only occur over the short-term from construction activities such as fugitive dust from site preparation, grading, and emissions from construction equipment exhaust. These temporary air quality impacts can and will be lessened by the Avoidance and Minimization Measures discussed later in this Section 4(f) Evaluation.

The proposed project will improve traffic movement in the general vicinity, thereby lowering the concentration of pollutants emitted by the motor vehicles. Consequently, no significant regional or local air quality impacts are anticipated over the long-term.

The proposed project is not expected to generate any additional traffic, and regional traffic trips are expected to remain the same. The highway is simply a conduit to enable people to get from one point to another. The highway itself does not generate additional traffic. The traffic generators are residences, schools, businesses, shopping centers, manufacturing areas, recreational areas, new developments, etc.

4.7 Water Quality

The proposed project will not modify a channel or waterbody of any type, or encroach upon a floodplain or adversely affect the quantity or quality of any surface water, groundwater, or public water supply. The proposed project area, including Walteria Park,

is situated in a highly urbanized area in the City of Torrance, outside the vicinity of any natural drainages, streams, or creeks.

5. The Proposed Alternatives Relative to Section 4(f)

This section summarizes the Alternatives that comprise the proposed project: The No-Build (Alternative 1), the Non-standard Build Alternative (Alternative 2), and the Full Standard Build Alternative (Alternative 3). Both build Alternatives call to improve and reconfigure the intersection by widening and upgrading via the acquisition of right of way, the construction of dedicated right and left-hand turn pockets, restriping, resignalization and utility relocation.

5.1 Alternative 1 - The "No Build" Alternative

The "No Build" or "Do Nothing" alternative would result in the cross-section of all four (4) legs of the PCH/Hawthorne Boulevard intersection remaining as is. The No-Build alternative would do nothing to improve the present day, or projected congestion and congestion related problems, thereby leading to a progressive deterioration in the Level of Service (LOS) provided. The purpose and need of the project would remain unaddressed, and thus the objectives of the proposed project unrealized (i.e. congestion relief and safety improvement). This approach is inconsistent with the Department's goal of minimizing congestion and maintaining an efficient and effective interregional mobility system. Caltrans's mission is to "Improve Mobility Across California".

5.2 Alternative 2 – Non-standard Build Alternative

Alternative 2 calls to improve and reconfigure the intersection as follows:

- Construct two (2) left turn pockets on both eastbound and westbound PCH
- Construct one (1) right turn pocket on both eastbound and westbound PCH
- Construct one (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH
- The number of through lanes on both PCH and Hawthorne Boulevard will remain unchanged

When considering the existing configuration, this alternative will add:

- One (1) left hand turn pocket on both eastbound and westbound PCH
- One (1) right turn pocket on both eastbound and westbound PCH
- One (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

This Alternative calls for the utilization of non-standard lane widths and full standard turn pocket widths. This means that all through lane widths will be 3.0m (10ft), instead of 3.6m (12ft), while both the left and right turn pockets will be 3.6m (12ft) in width. The

purpose of the non-standard lane widths is to ensure consistency between the existing through lanes leading into and out of the project limits. The non-standard land widths also minimize the right of way acquisition needs of the proposed project, thereby minimizing the impacts to local businesses. Please see the Appendices section of this document for layout and cross section drawings of this Alternative. Please see Table 13 for the list of right of way acquisition needs of this Alternative.

High Occupancy Vehicle (HOV) lanes, Park and Ride facilities, bike lanes, railroad involvement, navigable waterway involvement, and standard highway planting of trees and irrigation are not included as part of this project.

5.3 Alternative 3 – Full Standard Build Alternative

Like Alternative 2, this Alternative also calls to:

- Construct two (2) left turn pockets on both eastbound and westbound PCH
- Construct one (1) right turn pocket on both eastbound and westbound PCH
- Construct one (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH
- The number of through lanes on both PCH and Hawthorne Boulevard will remain unchanged

When considering the existing configuration, like Alternative 2, this alternative will add:

- One (1) left hand turn pocket on both eastbound and westbound PCH
- One (1) right turn pocket on both eastbound and westbound PCH
- One (1) exclusive right turn lane on northbound Hawthorne Boulevard to eastbound PCH

However, unlike Alternative 2, this Alternative involves the construction of all full standard lanes and turn pockets. This means that all through lanes, and left and right turn pockets, will be the full standard width of 3.6m (12ft), and thus safer. The traffic capacity of Alternative 2 and Alternative 3 will be the same however.

Alternative 3 will require greater right of way acquisition than Alternative 2, and thus will come at a greater economic cost and greater impact to the project area. Alternative 3 will also result in greater impacts to local businesses, and potentially to the local economy due to the higher number of businesses. Please see the Appendices section of this document for layout and cross section drawings of this Alternative. Also, please see Table 13 for the list of right of way acquisition requirements of this Alternative.

High Occupancy Vehicle (HOV) lanes, Park and Ride facilities, bike lanes, railroad involvement, navigable waterway involvement, and standard highway planting of trees and irrigation are not included as part of this project.

5.4 Discussion and Conclusion

Unfortunately, right of way is too constraining to design a safe and viable intersection improvement project without acquiring a miniscule portion of Walteria Park. Even though Alternative 2 calls for the design of sub-standard width through lanes (unlike Alternative 3 which calls for safer, full standard through lanes), encroaching slightly onto Walteria Park absolutely unavoidable. Constricting Alternative 2 even more would be unsafe.

Furthermore, as can be seen from Section 4.1 of this Section 4(f) Evaluation, the proposed project calls to acquire only a miniscule portion of Walteria Park. Thus, the Department believes that the conditions have been met for a Programmatic Section 4f Evaluation Procedures for Minor Involvements with Parklands. The proposed project meets the conditions for all programmatic 4(f) applications with regard to the type of project, proximity impacts resulting in constructive use, and the type of environmental documentation, and the amount of land to be acquired does not exceed:

- 10% of a 4(f) property consisting of less than 10 acres;
- 1 acre of land on a 4(f) property consisting of 10 to 100 acres; or
- 1% of a 4(f) property of more than 100 acres.

6. Section 4(f) Avoidance and Minimization Measures

6.1 Accessibility Avoidance and Minimization Measures

- A Traffic Management Plan (TMP) shall be prepared in conjunction with the City of Torrance. The TMP will consist of the following elements to minimize construction related traffic disruption:
    1) Temporary traffic controls and signing shall be utilized
    2) The implementation of traffic control procedures will be in conformance with the Caltrans Traffic Manual.
    3) A minimum of two through travel lanes in each direction will be provided.
    4) Public information center
    5) Additional project signing
    6) Advertising in local and regional newspapers Staff attendance at local neighborhood and business association meetings to inform residents and merchants/landowners of project progress
- In an effort to improve accessibility to Walteria Park, the Department proposed to the City of Torrance that the creation a new pedestrian access be incorporated into the proposed project. The City indicated it was not interested in that option because there used to be entrances on the north side of the park along PCH, but were closed off due to vandalism problems and pedestrian/vehicle conflicts at nearby fast food parking lots.

6.2 Visual Aesthetic Avoidance and Minimization Measures

Some street side planting areas containing grass and mature trees will be removed by the proposed project since after construction, the intersection will be a larger version of what it is now. However, the miniscule portion of Walteria Park that the Department proposes to acquire does not contain any scenic vistas, or scenic resources such as mature tree, rock outcroppings etc.

- The Caltrans Division of Environmental planning shall consult the City of Torrance and the Caltrans Office of Landscape Architecture regarding the feasibility of adding uniform street trees along the proposed project segment at a reasonable interval (50 feet on center) since mature trees will be removed because of the proposed project. The Department shall propose that the trees be drought tolerant and a size to match the scale of the intersection. Native trees shall be considered. The Department shall also propose that the City of Torrance maintain the trees, as it does the existing trees.

6.3 Biological Resource Avoidance and Minimization Measures

- All vegetation to be removed by the proposed project shall be done outside of the bird nesting season (March 1st – September 30th) so as to avoid impacts to nesting birds
- Also, please see Section 6.2 of this Section 4(f) Evaluation

6.4 Hydrology and Water Quality Avoidance and Minimization Measures

- A Water Pollution Control Plan shall be developed by the contractor, and approved by the Department, as well as Federal, State, and local resource agencies. This Plan will incorporate the resource agency approved methodology as well as all other appropriate techniques for reducing impacts to water quality.
- The Water Pollution Control Plan shall incorporate control measures in the following categories: Soil stabilization practices; sediment control practices; sediment tracking control practices; wind erosion control practices; and non-storm water management and waste management and disposal control practices
- If necessary, a re-vegetation plan shall be developed to restore and monitor the impacted area. Contour grading and landscaping with native plant species shall be utilized in stormwater retention and debris basin design.
- For both short and long-term water quality impacts, temporary as well as permanent Best Management Practices (BMPs) will be identified during final design when there is sufficient engineering details available to warrant competent analysis. The Department is committed to implementing cost-effective temporary and permanent BMPs as identified during final design.
- The contractor shall be required to comply with water pollution control provisions and Storm Water Pollution Prevention Plan (SWPPP) and conform to the

requirements of the Caltrans Standard Specifications Section 7-1.01G "Water Pollution," of the Standard Specifications.

- If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted. If necessary, place sandbags, strawbales, and silt fences in accordance with the SWPPP shall be used.

7. Other Evaluations Relative to Section 4(f) Requirements

The purpose of this discussion is to address Section 4(f) requirements relative to other park, recreational facilities, wildlife refuges, and historical properties in the project vicinity. However, there are no recreational facilities, wildlife refuges, or historic sites that will be impacted by the proposed project either directly or indirectly. There are no archaeological and historic sites that will be impacted by the proposed project (please see checklist item #5 in Section 4 of the attached EA/IS). There are no other public parks, private parks, recreational facilities, or wildlife refuges within approximately 0.8km (0.5 miles) of any of the proposed alternatives.

8. Section 6(f)

The Land and Water Conservation Fund Act lets State and local governments obtain grants to acquire or make improvements to parks and recreation areas. Section 6(f) of this Act prohibits the conversion of property acquired or developed with these grants to a non-recreational purpose without the approval of the Department of the Interior's (DOI) National Park Service. Walteria Park has not received grants from the Land and Water Conservation Fund Act therefore there is no use of Section 6(f) land.

9. Coordination

Walteria Park is owned and maintained by the City of Torrance. Coordination with the City regarding the proposed project took place on December 11, 2001 and September 25, 2002. Coordination with the City of Torrance Parks and Recreation Department was conducted on September 23, 2002. The small of acquisition of land from Walteria Park has been discussed, and the proposed project has the full support of the City of Torrance.

The Department conducted scoping from April 30, 2002 to May 30, 2002. Public Scoping Notification Ads were placed in the following newspapers on the following dates:

Los Angeles Times – South Bay Edition: April 28, 2002
Daily Breeze: April 30, 2002
La Opinion: April 30, 2002
The Philippine Times: May 3-9, 2002
The Peninsula News: May 2, 2002

Public Scoping Notification letters were mailed to every individual, official, business, and agency listed in Section 6.2 of the accompanying EA/IS. In addition to that, residents in a 2-mile radius of the proposed project area were mailed Scoping Notification flyers.

These Scoping Notification newspaper ads, letters, and flyers sought public comments, questions and concerns regarding the proposed project. The public was also encouraged to participate in the project process and invited to submit their written comments, questions, and concerns to the Department. The Department did not receive any public comments, questions, or concerns regarding Walteria Park.

SECTION 4(f) EVALUATION APPENDIX 1 – DESIGN LAYOUT

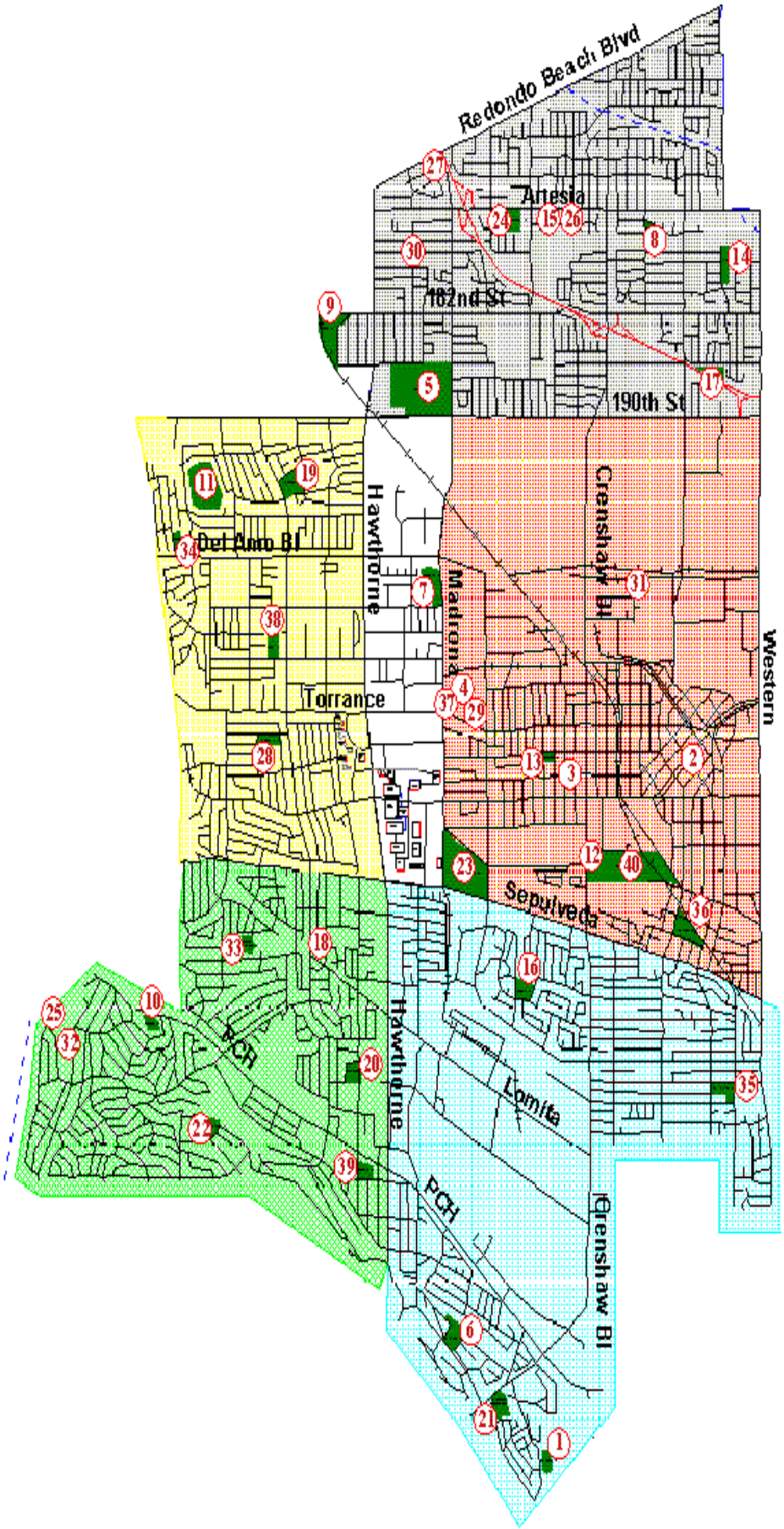
- **ALTERNATIVE 2**
- **ALTERNATIVE 3**

Insert Alt 2 Impact to Walteria Park Zoomed in Layout

Insert Alt 3 Impact to Walteria Park Zoomed in Layout

SECTION 4(f) EVALUATION APPENDIX 2 – Torrance Park System

1. Alta Loma Park
2. Bartlett Center
3. City Kids Child Care Center
4. Civic Center
5. Columbia Park
6. De Portola Park
7. Delthorne Park
8. Descanso Park
9. El Nido Park
10. El Retiro Park
11. Entradero Park
12. Farmers' Market
13. Greenwood Park
14. Guenser Park
15. Herma Tillim Center
16. Hickory Park
17. La Carretera Park
18. La Paloma Park
19. La Romeria Park
20. Lago Seco Park
21. Las Canchas Tennis Facility
22. "Rocketship" Park
23. Madrona Marsh Preserve
24. Mc Master Park
25. Miramar Park
26. N. Torrance Community Ctr
27. Osage Park
28. Paradise Park
29. Parks & Recreation Admin.
30. Pequeno Park
31. Pueblo Recreation Center
32. Riviera Park
33. Sea-Aire Golf Course
34. Sunnyglen Park
35. Sur La Brea Park
36. Torrance Park
37. Victor E. Benstead Plunge
38. Victor Park
39. Walteria Park
40. Wilson Park



SECTION 4(f) EVALUATION APPENDIX 3 – Walteria Park Layout*

*Currently Pending

Insert Walteria Park Layout Map as supplied by the City of Torrance Parks and Rec (pending Mike Wilson)